Project 8 Winery Project

SCH# 2022010188

Draft Environmental Impact Report

Prepared for
Placer County

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Project 8 Winery Project
Draft Environmental Impact Report

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1. Introduction

1. INTRODUCTION

1.1 TYPE AND PURPOSE OF THE EIR

The Project 8 Winery Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Sections 21000-21178, as amended, and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Sections 15000-15387 (CEQA Guidelines). Placer County is the lead agency for the environmental review of the Project 8 Winery Project (proposed project) evaluated herein and has the principal responsibility for approving the project. The applicant for the proposed project is identified as Building Engineering & Maintenance, Inc. (BEM). As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the environmental consequences of approving the proposed project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives which reduce environmental effects. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues. CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term project refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the County has determined that the proposed development is a *project* within the definition of CEQA, which has the potential for resulting in significant environmental effects.

The lead agency, which is Placer County for this project, is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a *project-level EIR* pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A *project-level EIR* focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

"Responsible agency" is defined as a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term responsible agency includes all California public agencies other than

the lead agency that have discretionary approval power over the project or an aspect of the project. The Central Valley Regional Water Quality Control Board (RWQCB) and Placer County Air Pollution Control District are identified as responsible agencies.

"Trustee agency" means a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. The only known possible trustee agency is the California Department of Fish and Wildlife (CDFW).

Although not subject to California law, and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) may also be called upon to grant approvals — under federal law — necessary for the development of the project site. The above agencies do not have duties under CEQA, but, rather, are governed by a variety of federal statutes, such as the Clean Water Act, which governs the dredging and filling of waters of the U.S. (e.g., wetlands), and the Endangered Species Act, which requires USACE to consult with the USFWS as part of the review process for any wetland or fill permits that may be required.

1.3 PROJECT SUMMARY

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The proposed project would be located on portions of several parcels consisting of Assessor's Parcel Numbers (APNs) 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The southerly portion of the project site, through which the proposed access road would meander, is located within the Horseshoe Bar/Penryn Community Plan (HBPCP) area. The remaining portion of the project site, on which the winery facilities would be located, is outside of the HBPCP area. The Placer County General Plan designates the northerly APN (031-220-061) as Rural Residential (1-10 Acre Minimum), while the two parcels within the HBPCP area are designated by the HBPCP as Rural Residential (2.3-4.6 Acre Minimum), consistent with the Placer County General Plan. The northerly parcel is zoned Farm combining Building site 20-Acre Minimum (F-B-X); and the remaining parcels are zoned Residential Agricultural combining Building site 100,000-square-foot Minimum (RA-B-100). Roadways in the immediate project vicinity include Callison Road, which forms the southern boundary of the project site, Ridgeview Lane to the west, and Taylor Road to the east, approximately 0.3-mile from the project site. Interstate 80 (I-80) is located approximately 1.5 miles to the east. Two Union Pacific Railroad (UPRR) tracks pass through the project area, with one track bordering the northern site boundary and the other track bordering the southern/southeastern site boundary. The spurs are used to move UPRR freight trains and Amtrak passenger trains.

The project site is located within a rural residential area of Placer County. The current zoning of adjacent properties is a mixture of RA-B-100, F-B-X 4.6-Acre Minimum, and F-B-X 20-Acre Minimum. To the north of the project site are UPRR railroad tracks, beyond which is undeveloped land and rural single-family residential homes. The current zoning designation of the land to the north of the project site is F-B-X 4.6-Acre Minimum. Land uses to the east of the project site include rural residences, which are zoned F-B-X 20-Acre Minimum, beyond which are UPRR railroad tracks. To the south of the project site are rural residences, Callison Road, and UPRR railroad tracks, beyond which are more rural residences. The current zoning designation of the land to the south of the project site is RA-B-100 2.3-Acre Minimum. Finally, land uses to the west of the project site include rural residences. The current zoning designation of the land to the west of the project site is RA-B-100 2.3-Acre Minimum.

The proposed project would develop a full production winery, including wine production facilities, a tasting room, and underground wine cave, an accessory restaurant, and other associated facilities, on 17.96 acres of the 44.14-acre parcel area. The proposed project components, along with all required entitlements and approvals, are summarized in the following sections. Please refer to Chapter 3, Project Description, of the EIR for a full description of the proposed project.

Octagon Building

The octagon building would total 29,250 square feet (sf) and would consist of a sub-level as well as four above-ground levels, reaching a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view). The building would sit atop the hill located in the northern portion of the project site in order to allow for gravity filtration down to the sub-level, as well as to provide views overlooking the existing vineyards below and surrounding region. The exterior of the building would include a living façade comprised of an exoskeletal structure covered with plant life to blend in with the surrounding environment. A minimum of 67 surface parking stalls would be included atop the hill for use by patrons of the octagon building, including Americans with Disabilities Act (ADA)-compliant parking stalls. A portion of this parking area would be covered by solar canopies.

The sub-level would be approximately 20 feet below grade and would total 8,000 sf. The sub-level would house the upper intake grape processing, miscellaneous utility systems for potable water, and a refrigerated area for temporary storage of incoming grapes.

Level one would be located at ground level and would serve as the primary entry for the octagon building. Level one would cover 5,600 sf, including a restroom and a 1,900-sf administration area. Level one would also include a porte cochère[1] where wine could be picked up by patrons. The porte cochère would serve as the point of entry to the reception area where two elevators and a stairway would be provided for access to the upper levels, the below-grade processing level, and the wine cave. A 3,600-sf outdoor terrace would also be accessible from level one.

Levels two and three would be approximately 3,700 sf each. Level two would consist of an on-site residential unit, while level three would contain a commercial kitchen, storage, and patron restrooms.

The fourth above-ground level would be comprised of a tasting room and accessory restaurant. A portion of level four would be located on a turntable, which would slowly rotate 360 degrees every 45 minutes. Level four would be circular in shape and approximately 4,750 sf. Of the 4,750 sf, 950 sf along the outer perimeter of the circular floor area would be dedicated to emergency egress and 800 sf in the center of the floor area would be used for the primary ingress/egress from the elevators and stairwell. A separate elevator would be provided for staff use only that would connect the kitchen on level three to levels four and five. The remaining 3,000 sf would be divided between a 600-sf wine tasting bar, a 250-sf dedicated restaurant counter, and on the turn table, a 1,425-sf tasting and agricultural event area, and a 725-sf dedicated accessory restaurant area with 32 seats.

The top 15 feet of the structure and final level (level five) would be 3,500 sf and would primarily be used to facilitate gravity filtration of the wine during processing. Gravity filtration would be carried out by bringing the unfinished wine to the top level in 550-gallon vessels and allowing the wine to flow down to the level of the wine cave (approximately 160 feet), which would create the

[1] A covered entrance large enough for vehicles to pass through, typically opening into a courtyard.

necessary pressure (70 pounds per square inch [psi]) for the wine to be filtered, when necessary, without the use of pumps, thus preserving the ideal molecular structure of the wine. Additionally, a private tasting room to be called the "550 Room", totaling 550 sf, would be located on level five.

Pursuant to Section 17.44.010 and Section 17.10.010 of the Placer County Code, the maximum allowable building height for the project site is 36 feet. Therefore, the proposed project would require a Zoning Text Amendment adding language to Placer County Winery and Farm Brewery Ordinance, Section 17.56.330(E), Development and Operational Standards, to allow structures (in this case, the octagon building) to exceed the prescribed height limit for the applicable zone if the additional height is authorized through a conditional use permit process that includes an analysis of visual impacts. The Zoning Text Amendment would allow the octagon building to be built at a height of 75 feet from the finished grade (plus rooftop mechanical equipment). The rooftop mechanical equipment would be screened from view.

Processing/Warehouse Building

The processing/warehouse building would be used for bottling, product storage, supply storage, equipment storage, and shipping/receiving with an enclosed truck dock. The building would cover approximately 26,000 sf on the ground level. The ground level would be dedicated to production uses excluding 300 sf to be used for wine order pickup. Above the ground level would be a mezzanine level covering approximately 2,500 sf for administrative uses (i.e., offices, conference room, facilities) and additional storage. At the roof level would be a 2,300-sf rooftop terrace, half of which would be enclosed to create a two-level tasting room open to the public. The remainder of the roof level would be unoccupied and would be allocated to solar power generation.

The processing/warehouse building would be located at the base of the hillside on which the octagon building would be constructed; and at ultimate buildout, the warehouse building would be linked to the octagon building by pedestrian bridges elevated over the encased canal and roadway connected to a continuous meandering walkway, which would provide a surface connection between the two buildings. A minimum of 19 parking stalls, including required ADA-compliant parking provisions, would be dedicated to the processing/warehouse building. The parking stalls would be located just west of the building, along either side of the building entrance, as well as behind the building adjacent to the loading dock entrance.

Wine Caves

A network of wine caves would be constructed south of the octagon building at a maximum vertical depth of 90 feet below grade and would consist of a fermentation tank room, barrel aging rooms, collection room, two meeting rooms, and two restrooms. The wine caves would cover approximately 32,000 sf. Access would be provided from the octagon building by way of the aforementioned elevator and stairwell. In addition, pedestrian access to the southern end of the wine caves would be provided at grade level through two pedestrian access points. A secondary access would be provided to serve as access for forklifts and utility vehicles. A minimum of 27 parking stalls located adjacent to the octagon building and the processing/warehouse building would be dedicated to serving the wine caves.

Gate House

A gate house is proposed to be developed adjacent to the gates at the main entrance from Callison Road, north of the roundabout. The gate house would consist of a 180-sf building and would house controls for the gates and exterior lighting for the entrance and lower roadway. The gate house would primarily be controlled by a virtual attendant; however, non-virtual occupancy

would occasionally occur. One parking stall and a charging station for an electric vehicle would be provided at the gate house.

Utility Pad

An approximately 900-sf outdoor, covered utility pad would be built into the hillside, approximately 40 feet south of the Antelope Canal, near the eastern boundary of the project site. The utility pad would be surrounded by walls on all sides and covered by a shade structure. The utility pad would host the main electrical service, a 660 kilovolt-ampere (kVA) minimum diesel or propane generator with required electrical interlock, interlock to on-site solar arrays, telecommunication panel enclosure, propane tank, and a small house panel and controller for site lighting. Access would be provided to the utility pad by the on-site roadway. Three parking stalls would be located adjacent to the utility pad to serve as overflow employee parking.

Project Operations

The principal proposed land use would be the operation of a winery that would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery, primarily in the form of small agricultural promotional events. Additional special events would occasionally be held, as further discussed below. It is noted that, consistent with Section 17.56.330(B) of the Winery and Farm Brewery Ordinance, tasting is allowed concurrent with on-site events.

Agricultural Promotional Events and Special Events

Agricultural Promotional Events are proposed as part of project operations in accordance with the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330. In general, these events would consist of professional events and/or gatherings that support the promotion of wine being produced on-site and at other wine-making facilities in Placer County, as well as the promotion of pairing wine with food prepared with a focus on locally-sourced ingredients. Agricultural Promotional Events could occur any day of the week from 7:00 AM to 10:00 PM.

Pursuant to Section 17.56.330(D)(4)(a), Agricultural Promotional Events are not limited in number. The project applicant has indicated that up to approximately 208 Agricultural Promotional Events could take place on-site annually, which is consistent with assumptions made in the WFBEIR. The Winery and Farm Brewery Ordinance also states that an Agricultural Promotional Event accommodates fifty (50) people or less at one time (excluding staff and tasting room patrons). However, Section 17.56.330(D)(4)(a) states that, for large wineries located on forty (40) acres or greater, additional attendees may be permitted subject to a Conditional Use Permit (CUP). The project applicant is requesting a CUP to increase the maximum attendees at one time for Agricultural Promotional Events from 50 to 75.

Special Events, as defined by the Placer County Winery and Farm Brewery Ordinance, include greater than 50 people at one time, excluding staff and tasting room patrons and not defined as an Agricultural Promotional Event pursuant to Section 17.56.330(D)(4)(a). Per Table 3 of Section 17.56.330 (B) of the ordinance, Special Events are allowed by right, but limited to a maximum of 12 per year. A maximum of 200 people at one time are allowed at Special Events. The proposed project would comply with the requirements included in Table 3 of the Winery and Farm Brewery Ordinance.

Pursuant to Section 17.56.330(B), Special Events could include private parties, fundraisers, social or educational gatherings where outside alcohol may be allowed, and events where the property owner is compensated in exchange for the use of the site and facility (referred to as a facility rental). Weddings are included in the aforementioned general categories of allowable Special Events. Special events do not include industry-wide events, the normal patronage of a tasting room, and private gatherings of the owner where the general public does not attend.

Accessory Use – Restaurant

The proposed project would require approval of a CUP to operate a reservation-only Accessory Use – Restaurant, as defined by and allowed pursuant to the Placer County Winery and Farm Brewery Ordinance. Though subordinate to the primary services offered to guests, and while small as compared to the overall operation, the accessory restaurant is a vital component of the winery's business model. The opportunity to experience the pairing of professionally prepared foods with premiere wines is a long-established expectation in the industry and among wine afficionados and plays a pivotal role in the success of a high-end winery. The reservation-only accessory restaurant/commercial kitchen could operate daily from 10:00 AM to 5:00 PM for tasting room support; 11:00 AM to 2:30 PM for lunch support; 5:30 PM to 10:00 PM for formal dinner support; 7:00 AM to 10:00 PM for Agricultural Promotional Event support; and 10:00 AM to 10:00 PM for Special Event support. Made-to-order lunch and dinner service would be limited to a maximum of 32 patrons each, seated in the dedicated 725-sf accessory restaurant area.

Project Approvals

The proposed project would require County approval of the following discretionary actions:

- Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330; and
- CUP for the operation of a Large Winery on 40+ acres with operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events, and to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the Draft EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project.

Upon completion of the Draft EIR and prior to circulation to State and local agencies and interested members of the public, a notice of completion is filed with the SCH and a public notice of availability is published to inform interested parties that a Draft EIR is available for agency and public review. In addition, the notice provides information regarding the location where copies of

the Draft EIR are available for public review and any public meetings or hearings that are scheduled. The Draft EIR is circulated for a minimum period of 45 days, during which time reviewers may submit comments on the document to the lead agency. The lead agency must respond to comments in writing. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an EIR after public notice of availability is given, but before certification of the EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final EIR will be prepared, containing public comments on the Draft EIR and written responses to those comments, as well as a list of changes to the Draft EIR text necessitated by public comments, as warranted. Before approving a project, the lead agency shall certify that the EIR (consisting of the Draft EIR and Final EIR) has been completed in compliance with CEQA, and that the EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the EIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 SCOPE OF THE EIR

An Initial Study has not been prepared for the proposed project, as the EIR addresses all CEQA-required environmental topics identified in the CEQA Guidelines. The following environmental issue areas are addressed in the EIR:

- Aesthetics;
- Agriculture and Forestry Resources;
- Air Quality and Greenhouse Gas Emissions;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Public Services and Utilities;
- Transportation;
- Tribal Cultural Resources; and
- Wildfire.

In addition to the foregoing resource areas, Chapter 19, Effects Not Found to be Significant, has been prepared to present information regarding resource areas that do not have the potential to be affected by the proposed project.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4 through 18 of the EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. Impacts that are determined to be significant in Chapters 4 through 18, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. Chapter 20 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 21 of the EIR.

1.6 DEFINITION OF BASELINE

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a project-level EIR pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A project-level EIR focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

According to CEQA Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline physical conditions" against which project-related changes could be compared. In addition, CEQA Guidelines Section 15126.2(a) states that an EIR shall identify and focus on the significant environmental effects of the proposed project. The CEQA Guidelines, Section 15126.2(a), states in pertinent part:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed project was published on January 13, 2022. Therefore, conditions existing at that time are considered to be the CEQA baseline against which changes that would result from the proposed project are evaluated. Impacts could include both direct and indirect physical changes to the baseline condition. The baseline condition for the proposed project site is described in Chapter 3, Project Description, of this EIR. The baseline conditions pertaining to each resource area are described in the "Existing Environmental Setting" section of the respective chapters of this EIR.

1.7 SIGNIFICANCE CRITERIA

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance." In addition, the Guidelines state, "An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (CEQA Guidelines Section 15382).

As presented in Section 1.12 below, the level of significance of an impact prior to mitigation is included at the end of each impact discussion throughout the technical chapters of this EIR. The following levels of significance prior to mitigation are used in this EIR:

1) Less-than-Significant: Impacts that are adverse, but that do not exceed the specified thresholds of significance;
2) Significant: Impacts that exceed the defined standards of significance and require mitigation;
3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project's incremental contribution towards the cumulative impacts would not be considered significant; and
4) Cumulatively Considerable: Where cumulative impacts have been identified and the project's incremental contribution towards the cumulative impacts would be considered significant.

If an impact is determined to be significant or cumulatively considerable, mitigation is included, if available, in order to reduce the specific impact to the maximum extent feasible. A statement of the level of significance of an impact after mitigation is also included in each impact discussion throughout the technical chapters of this EIR. The following levels of significance after implementation of mitigation are used in the EIR:

1) Less-than-Significant: Impacts that exceed the defined standards of significance but can be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures;
2) Less than Cumulatively Considerable: Where the project's incremental contribution towards cumulative impacts would be eliminated or reduced to a less than cumulatively considerable level through the implementation of feasible mitigation measures; and
3) Significant and Unavoidable Impact: An impact (project-level or cumulative) that cannot be eliminated or reduced to a less-than-significant or less than cumulatively considerable level through the implementation of feasible mitigations measures.

Each environmental area of analysis uses a distinct set of significance criteria. Where measurable and explicit quantification of significance is identified, such as violation of an ambient noise level standard, this measurement is used to assess the level of significance of a particular impact in this EIR. If criteria for determining significance relative to a specific environmental resource impact are not identified in the CEQA Guidelines, criteria were developed for this Draft EIR.

The significance criteria are identified at the beginning of the Impacts and Mitigation Measures section in each of the technical chapters of this EIR. Although significance criteria are necessarily different for each resource considered, the provided significance levels ensure consistent evaluation of impacts for all resource areas evaluated.

1.8 NOTICE OF PREPARATION AND SCOPING

In accordance with CEQA Guidelines Section 15082, an NOP was circulated to the public, local, State and federal agencies, and other known interested parties for a 30-day public and agency review period on January 13, 2022 (included as Appendix A). The purpose of the NOP was to provide notification that an EIR for the proposed project was being prepared and to solicit public input on the scope and content of the document.

An NOP for the proposed project was prepared and circulated to agencies and the public from January 13, 2022 to February 11, 2022. In addition, pursuant to CEQA Guidelines Section 15082, Placer County held an NOP scoping meeting during the 30-day review period, on February 8, 2022, for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend and provide input on the scope of the EIR. A total of 34 comment letters were received during the NOP public review period and three comment letters were received after the NOP public review period. The comment letters are provided as Appendix B to this EIR. All comments were taken into consideration during the preparation of this Draft EIR. A summary of the NOP comments received is provided in Section 1.9 below.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period from January 13, 2022 to February 11, 2022, Placer County received 34 comment letters. An additional three (3) letters were received after the close of the public review period, for a total of 37 comment letters. In addition, verbal comments were received at the public scoping meeting held on February 8, 2022. A copy of each letter, as well as a summary of the verbal scoping meeting comments, is provided in Appendix B of this EIR. The comment letters received during the NOP public review period were authored by the following representatives of public agencies and groups, as well as individual members of the general public:

Public Agencies

- California Department of Fish and Wildlife – Kelley Barker;
- California Department of Transportation (Caltrans) – Kevin Yount;
- Pacific Gas and Electric Company – Plan Review Team (2) (late letter); and
- Central Valley Regional Water Quality Control Board – Greg Hendricks (late letter).

Groups

- California Native Plant Society, Redbud Chapter – Leslie Warren (late letter);
- Defend Granite Bay; and
- Public Interest Coalition – Marilyn Jasper.

Individuals

- Ann Hendrikson-Pantos (3);
- Carol Brock;
- Lindsay Markin;
- Patty Neifer (3);
- Heidi Storm;
- Lisa Clingan;
- Morgan Buttram;
- Sara Stephens;
- Tim Onderko;
- Tish Walters;
- Doug Diruscio;
- Gabriele Windgasse;
- Pierre Marchal;
- Ryan Fogarty;
- Cathy Chappell;

- Steve Fettke;
- Mark and Jennie Nitta;
- Beth A. Sunflower Gouveia;
- Larry Gouveia;
- Michael and Cheryl Schmit;
- Cheryl Berkema;
- Muriel Davis (2);
- Gary and Deborah Cheris; and
- Gayle Russel.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters and verbal comments received on the scope of the EIR:

Aesthetics *(c.f. Chapter 4)*	Concerns related to: • The project's effects on the unique rural feel of the area. • Increases in nighttime light and glare due to project implementation. • Scenic Corridor preservation. • Compliance with Ridgeline Protection policies. • Building height in excess of County standards that would require a variance.
Agriculture and Forestry Resources *(c.f. Chapter 5)*	Concerns related to: • Violation of a Williamson Act Contract.
Air Quality and Greenhouse Gas Emissions *(c.f. Chapter 6)*	Concerns related to: • Increased air pollution as a result of increased traffic. • Emittance of contaminants resulting from project operation.
Biological Resources *(c.f. Chapter 7)*	Concerns related to: • Loss of wildlife habitat. • Loss of plant habitat. • Disruption of wildlife movement corridors. • Removal of trees. • Contamination of aquatic habitat.
Cultural Resources *(c.f. Chapter 8)*	Concerns related to: • Cultural, historical, or tribal resources at the project site. • Preservation of historic roads.
Geology and Soils *(c.f. Chapter 10)*	Concerns related to: • Lack of a seismic study. • Grading and excavation activities. • Soil erosion. • Soils incapable of supporting the use of septic tanks.
Hazards and Hazardous Materials *(c.f. Chapter 11)*	Concerns related to: • Use of pesticides, fungicides, and herbicides.
Hydrology and Water Quality *(c.f. Chapter 12)*	Concerns related to: • Increased erosion due to stormwater runoff from the proposed project. • Changing the drainage pattern of the area. • Increased pollution in area waterways. • Groundwater contamination.

Land Use and Planning *(c.f. Chapter 13)*	Concerns related to: • Redesignation of agricultural zoning. • Incongruity of industrial/retail use with agricultural and rural residential surroundings. • Compliance with applicable ordinances and policies. • Insufficient size of project site to handle operations of the project.
Noise *(c.f. Chapter 14)*	Concerns related to: • Increase in noise levels to surrounding residential areas. • Noise effects on wild animals.
Public Services and Utilities *(c.f. Chapter 15)*	Concerns related to: • Increased need for police enforcement. • Increased use of wastewater infrastructure. • Insufficient water supply to support project operation.
Transportation *(c.f. Chapter 16)*	Concerns related to: • Traffic increases in the project vicinity. • Suitability of access roads. • An excess of parking spaces.

All of the CEQA-related issues are addressed in this EIR, in the relevant sections identified in the first column.

1.10 PROJECT CHANGES SINCE PUBLICATION OF THE NOP

Since the NOP was published, relatively minor changes to the proposed project have been made, including the following:

- The daily number of patrons allowed in the on-site restaurant for lunch and dinner service would be limited to a maximum of 32 patrons each, which is a reduction from what was identified in the NOP.
- The size of each of the three proposed on-site propane tanks would be reduced to 1,500 gallons, as compared to the 2,500-gallon tanks identified in the NOP. In addition, rather than one of the tanks being located in the eastern portion of the project site, near the truck turnaround area, the tank would be located west of the processing/warehouse building.
- For the purposes of the analysis included in this EIR, two options for the proposed on-site septic system are considered and evaluated, as compared to the single system identified in the NOP.
- Rather than a Variance to allow the octagon building to reach a height of 75 feet from the finished grade, the project would require a Zoning Text Amendment to add height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330, subject to approval of a Conditional Use Permit.

The above changes have been evaluated throughout this EIR.

1.11 DRAFT EIR AND PUBLIC REVIEW

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the Lead Agency on the Draft EIR's accuracy and completeness. Release of the Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft EIR at the County's website at:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

or at following address during normal business hours:

Placer County, Community Development Resource Center
3091 County Center Drive
Auburn, CA 95603

Comments may be submitted both in written form and/or orally at the public hearing on the Draft EIR. Notice of the time and location of the hearing will be published in local newspapers, mailed to property owners and residents surrounding the project, emailed to residents that have requested to be placed on the project's email notification list, posted on the County's website, and posted at and adjacent to the site prior to the hearing.

All comments or questions regarding the Draft EIR should be addressed to:

Placer County, Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603
(530) 745-3132
fax (530) 745-3080
cdraecs@placer.ca.gov

1.12 ORGANIZATION OF THE DRAFT EIR

The EIR is organized into the following sections:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the Draft EIR and the review and certification process, as well as summaries of the chapters included in the Draft EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. In addition, the Executive Summary includes a summary of the project alternatives and areas of known controversy.

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, objectives, and technical characteristics.

Chapter 4 – Aesthetics

The Aesthetics chapter of the EIR describes existing aesthetic resources for the project area and the region, and evaluates potential aesthetic impacts of the project. According to CEQA, the concept of aesthetic resources refers to scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State Scenic Highway), the existing visual character or quality of the project area, and light and glare impacts.

Chapter 5 – Agriculture and Forestry Resources

The Agricultural and Forestry Resources chapter of the EIR summarizes the status of the existing agricultural resources within the boundaries of the project site, using the current State model and data, including identification of any Prime/Unique Farmland or Farmland of Statewide Importance within the project boundaries. If Prime/Unique Farmland or Farmland of Statewide Importance is determined to be on-site, the analysis will address the conversion of said lands to non-residential uses. In addition, any conflicts with existing zoning for agricultural use, Williamson Act Contracts, or right-to-farm ordinances applicable to the proposed project will be identified. The Agriculture and Forestry Resources chapter of the EIR will also discuss forestry resources present on the project site, and will address the proposed project's potential to result in the loss of forest land or conversion of forest land to non-forest use.

Chapter 6 – Air Quality and Greenhouse Gas Emissions

The Air Quality and Greenhouse Gas Emissions chapter of the EIR describes the impacts of construction and operation of the proposed project related to air quality and global climate change. The chapter was prepared using methodologies and assumptions recommended within the CEQA Air Quality Handbook of the Placer County Air Pollution Control District. This chapter is based on the results of the *Air Quality and Greenhouse Gas Modeling Results and Calculations* (Appendix C) prepared for the proposed project.

Chapter 7 – Biological Resources

The Biological Resources chapter of the EIR evaluates the special-status biological resources known to occur or potentially occur within the proposed project area. The chapter describes potential impacts to those resources and identifies measures to eliminate or substantially reduce those impacts to the maximum extent feasible. This chapter is based on the results of the *Biological Resources Assessment, Aquatic Resources Delineation Report,* and *Oak Resources Technical Report* (Appendices D, E, F, respectively) prepared for the proposed project.

Chapter 8 – Cultural Resources

The Cultural Resources chapter of the EIR evaluates archaeological and historical resources known to be located within the proposed project area. The chapter summarizes the existing setting with respect to the aforementioned resources, identifies thresholds of significance and project impacts to such resources, and sets forth mitigation measures that would be necessary to reduce impacts to the maximum extent feasible. This chapter is based on the results of the *Cultural Resources Study* (Appendix G) prepared for the proposed project.

Chapter 9 – Energy

The Energy chapter of this EIR describes the potential impacts of the proposed project related to energy. The chapter includes a discussion of the existing energy setting, impacts associated with energy use, and mitigation measures warranted to reduce or eliminate any identified significant impacts.

Chapter 10 – Geology and Soils

The Geology and Soils chapter of the EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by seismic hazards such as ground shaking, liquefaction, and expansive soil characteristics. In addition, the chapter includes an analysis related to paleontological resources. This chapter is based on the results of the *Geotechnical Engineering Study*, *Geostructural*

Engineering Study, Slope Stability Study for Septic Leach Field, and *Paleontological Resources Assessment* (Appendices H, I, J and K, respectively) prepared for the proposed project.

Chapter 11 – Hazards and Hazardous Materials

The Hazards and Hazardous Materials chapter of the EIR describes existing and potential hazards and hazardous materials within the project area. The chapter discusses potential impacts posed by these hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project area. This chapter is based on the results of the *Phase I Environmental Site Assessment and Shallow Soil Sampling Report* (Appendix L) prepared for the proposed project.

Chapter 12 – Hydrology and Water Quality

The Hydrology and Water Quality chapter of the EIR describes existing drainage and stormwater conditions for the project site, as well as current stormwater flows and stormwater infrastructure, and potential for flooding. The chapter evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, groundwater recharge, and on- and off-site flooding. This chapter is based on the results of the *Drainage Technical Memorandum* and the *Public Well Impact Evaluation* (Appendices M and N) prepared for the proposed project.

Chapter 13 – Land Use and Planning

The Land Use and Planning chapter of the EIR examines the proposed project's compatibility with existing and planned land uses in the area, current General Plan and HBPCP policies, and zoning designations.

Chapter 14 – Noise

The Noise chapter of the EIR describes the existing noise environment in the project vicinity and identifies potential impacts and mitigation measures related to the construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and, if warranted, the recommended mitigation measures designed to reduce significant impacts to the maximum extent feasible. This chapter is based on the results of the *Environmental Noise and Vibration Assessment* (Appendix O) that was prepared for the proposed project.

Chapter 15 – Public Services and Utilities

The Public Services and Utilities chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project related to fire and law enforcement protection services, water supply, wastewater systems, and solid waste disposal. The utilities analysis is based on the *Domestic Water System Permit Application Technical Report* and *Anticipated On-Site Sewage Flows Technical Memorandum* (Appendices P and Q) prepared for the proposed project.

Chapter 16 – Transportation

The Transportation chapter of the EIR discusses existing transportation and circulation conditions within the project area and the effects to the roadway network as a result of the proposed project and future, projected growth. Vehicle miles travelled (VMT) is used as the metric for assessing transportation impacts, consistent with CEQA Guidelines. The analysis includes consideration of transit, bicycle, and pedestrian impacts, as well as emergency evacuation and roadway safety.

This chapter is based on the results of the *Transportation Impact Analysis* (Appendix R) that was prepared for the proposed project.

Chapter 17 – Tribal Cultural Resources

The Tribal Cultural Resources chapter of the EIR addresses known and unknown tribal cultural resources in the vicinity of the project area. Tribal cultural resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. The chapter summarizes the existing setting with respect to tribal cultural resources, identifies thresholds of significance, evaluates project impacts to such resources, and sets forth mitigation measures.

Chapter 18 – Wildfire

The Wildfire chapter of the EIR summarizes the existing wildfire setting and identifies the wildfire potential within the project area. The chapter includes a review of planned fuel treatments projects within the region and consideration of site-specific factors that may affect the wildfire potential at the project site.

Chapter 19 – Effects Not Found to be Significant

The Effects Not Found to be Significant chapter of the EIR addresses the project's effects that were determined not to be significant. CEQA Guidelines Section 15128 requires a brief discussion explaining why these effects were not found to be significant.

Chapter 20 – Statutorily Required Sections

The Statutorily Required Sections chapter of the EIR provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential growth-inducing impacts, significant and unavoidable impacts, and significant irreversible changes to the environment.

Chapter 21 – Alternatives Analysis

The Alternatives Analysis chapter of the EIR describes and evaluates the alternatives to the proposed project. It should be noted that the alternatives are analyzed at a level of detail less than that of the proposed project; however, the analyses will include sufficient detail to allow for a meaningful comparison of impacts.

Chapter 22 – References

The References chapter of the EIR provides bibliographic information for all references and resources cited.

Chapter 23 – EIR Authors and Persons Consulted

The EIR Authors and Persons Consulted chapter of the EIR lists EIR and technical report authors who provided technical assistance in the preparation and review of the EIR.

Appendices

The Appendices include the NOP, comments received during the NOP comment period, and all technical reports prepared for the proposed project.

1.13 TECHNICAL CHAPTER FORMAT

Each technical chapter addressing a specific environmental issue begins with an **introduction** describing the purpose of the section. The introduction is followed by a description of the project's

existing environmental setting as the setting pertains to that particular issue. The setting description is followed by the **regulatory context** and the **impacts and mitigation measures** discussion, which contains the **standards of significance**, followed by the **method of analysis**. The **impact and mitigation measures** discussion includes impact statements prefaced by a number in bold-faced type (for both project-level and cumulative analyses). An explanation of each impact and an analysis of the impact's significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement (see below). The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below:

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance.

X-1 Statement of Impact

Discussion of impact for the proposed project in paragraph format.

Statement of ***level of significance*** of impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR: less than significant, significant, or significant and unavoidable. If an impact is determined to be significant, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant level with implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

X-1(a) *Required mitigation measure(s) presented in italics and numbered in consecutive order.*

X-1(b) *Required additional mitigation measure, if necessary.*

Cumulative Impacts and Mitigation Measures

The following discussion of cumulative impacts is based on implementation of the proposed project in combination with cumulative development within the applicable area or region.

X-2 Statement of Cumulative Impact

Discussion of cumulative impacts for the proposed project in paragraph format.

As discussed in detail in Chapter 20, Statutorily Required Sections, of the EIR, the cumulative setting for the proposed project is generally considered to be development of the proposed project, as well as buildout within the HBPCP and the Bickford Ranch Specific Plan (BRSP).

Statement of ***level of significance*** of cumulative impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR for cumulative impacts: less than significant, less than cumulatively considerable, cumulatively considerable, or significant and unavoidable. If an impact is determined to be cumulatively considerable, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less than cumulatively considerable level with the implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

X-2(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

X-2(b) *Required additional mitigation measure, if necessary.*

1.14 FINAL EIR AND EIR CERTIFICATION

Upon completion of the public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and responses to those comments. The Final EIR will also include the Mitigation Monitoring and Reporting Plan (MMRP) prepared in accordance with Section 21081.6 of the Public Resource Code. The Final EIR will include any revisions to the Draft EIR made in response to public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the County can consider approval of the project, it must first certify that the EIR has been completed in compliance with CEQA, that the County Board of Supervisors has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The County will also be required to adopt Findings of Fact, and, for any impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

2. Executive Summary

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4 through 18. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 21, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The proposed project would be located on portions of several parcels consisting of Assessor's Parcel Numbers (APNs) 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The southerly portion of the project site, through which the proposed access road would meander, is located within the Horseshoe Bar/Penryn Community Plan (HBPCP) area. The remaining portion of the project site, on which the winery facilities would be located, is outside of the HBPCP area. The Placer County General Plan designates the northerly APN (031-220-061) as Rural Residential (1-10 Acre Minimum), while the two parcels within the HBPCP area are designated by the HBPCP as Rural Residential (2.3-4.6 Acre Minimum), consistent with the Placer County General Plan. The northerly parcel is zoned Farm combining Building site 20-Acre Minimum (F-B-X); and the remaining parcels are zoned Residential Agricultural combining Building site 100,000-square-foot Minimum (RA-B-100). Roadways in the immediate project vicinity include Callison Road, which forms the southern boundary of the project site, Ridgeview Lane to the west, and Taylor Road to the east, approximately 0.3-mile from the project site. Interstate 80 (I-80) is located approximately 1.5 miles to the east. Two Union Pacific Railroad (UPRR) tracks pass through the project area, with one track bordering the northern site boundary and the other track bordering the southern/southeastern site boundary. The spurs are used to move UPRR freight trains and Amtrak passenger trains.

The proposed project would develop a full production winery, including wine production facilities, a tasting room, and underground wine cave, an accessory restaurant, and other associated facilities, on 17.96 acres of the 44.14-acre parcel area.

The proposed project would require County approval of the following:

- Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330; and
- CUP for the operation of a Large Winery on 40+ acres with operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events, and to allow the octagon building to reach a height of 75

feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following technical chapters: Aesthetics; Biological Resources; Cultural Resources; Geology and Soils; Hydrology and Water Quality; Transportation; Tribal Cultural Resources; and Wildfire. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring and Reporting Program. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the identified impacts in the technical chapters of the EIR is presented in Table 2-1. In Table 2-1, the proposed project impacts are identified for each technical chapter (Chapters 4 through 18) of the EIR. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the following:

- No Project (No Build) Alternative;
- Reduced Height Alternative; and
- Reduced Operations Alternative.

For a more thorough discussion of project alternatives, please refer to Chapter 21, Alternatives Analysis.

No Project (No Build) Alternative

The No Project (No Build) Alternative assumes that the proposed project site would remain in its current condition and would not be developed. As described in this EIR, the project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The Antelope Canal, owned by Placer County Water Agency (PCWA), traverses the entire property from east to west and is fed by the Dutch Canal. The No Project (No Build) Alternative would not meet any of the project objectives.

Reduced Height Alternative

The Reduced Height Alternative would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave network, an accessory restaurant, and other associated facilities. However, under the Reduced Height Alternative, the octagon building would be split into two shorter buildings, each built to a height of 36 feet, which is the maximum allowable height for buildings within the Farm combining Building site 20-Acre Minimum (F-B-X) zoning designation. As such, neither a Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330 of the Placer County Code, nor a Conditional Use Permit (CUP) to allow the octagon building to reach a height of 75 feet from the finished grade, would be required under the Reduced Height Alternative.

As discussed in Chapter 3, Project Description, of this EIR, under the proposed project the octagon building would sit atop the hill located in the northern portion of the project site in order to allow for gravity filtration down to the wine cave level. Given that the Reduced Height Alternative would reduce the height of the octagon building by approximately 39 feet, the split building under the Alternative would not be tall enough to create the necessary 70 pounds per square inch (psi) of pressure required for the wine to be filtered. As such, a 75-foot tall agricultural structure would be developed on-site under the Reduced Height Alternative, and would be used solely for the gravity filtration process. A Minor Use Permit would be required to allow the structure to be constructed at a height of 75 feet.

The proposed project would result in a disturbance area of approximately 3.96 acres, and a woodland canopy impact of approximately 0.96-acre associated with the octagon building, while the Reduced Height Alternative would result in a disturbance area of approximately 5.42 acres, and a woodland canopy impact of approximately 2.62 acres associated with the alternative building design. Therefore, the Alternative would result in an increased disturbance area of approximately 1.46 acres as compared to the proposed project, as well an increase in woodland canopy impacts by approximately 1.65 acres.

All other on- and off-site improvements required under the Reduced Height Alternative, including improvements to Callison Road, would be identical to the proposed project. In addition, while a CUP to allow the height of the octagon building to reach 75 feet would not be required, the Alternative would still require a CUP for the operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events.

Because the Reduced Height Alternative would generally result in the development of the same winery facilities as the proposed project, all of the project objectives would be fully met except objective #4, insofar as the views of the winery vineyards and surrounding area would not be as spectacular due to the lower height of the octagon buildings.

Reduced Operations Alternative

Under the Reduced Operations Alternative, the project site would be developed with a full production winery identical to the proposed project, including wine production facilities, a tasting room, an underground wine cave network, an accessory restaurant, and other associated facilities, on approximately 17.96 acres of the 44.14-acre parcel area. However, while the proposed project would operate seven days a week, under the Reduced Operations Alternative the winery would operate four days a week (Thursday through Sunday). In addition, while the proposed project would include up to 220 events per year, including 208 Agricultural Promotional Events, and a maximum of 12 Special Events, the Reduced Operations Alternative would assume

a maximum of 115 events per year, including 103 Agricultural Promotional Events and 12 Special Events. Finally, the Reduced Operations Alternative would comply with the maximum attendee requirement of 50 people at a time for Agricultural Promotional Events. As such, a CUP to increase the number from 50 to 75 maximum attendees at one time for Agricultural Promotional Events would not be required under the Reduced Operations Alternative.

Given that all on- and off-site improvements required under the Reduced Operations Alternative would be identical to the proposed project, including the 75-foot tall octagon building, the Alternative would still require a Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330 of the Placer County Code, as well as a CUP for the operation of an Accessory Use – Restaurant, and to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Because the Reduced Operations Alternative would generally result in the development of the same winery facilities as the proposed project, project objectives #1, #2, #3, #5, and #6 would be fully met. However, while the Alternative would still provide on-site wine tasting, due to the reduced operations of the Alternative, on-site wine tastings would not occur daily, and, thus, Project Objective #4 would only be partially met.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” The No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the impacts resulting from the proposed project would not occur under the Alternative.

The No Project (No Build) Alternative would not meet any of the project objectives. The Reduced Height Alternative and the Reduced Operations Alternative would generally result in the development of the same winery facilities as the proposed project. All of the project objectives would be fully met under the Reduced Height Alternative. Under the Reduced Operations Alternative, on-site wine tastings would not occur daily and, thus, Project Objective #4 would only be partially met.

The Reduced Height Alternative would result in fewer impacts to one issue area, similar impacts to one issue area, and greater impacts to the remaining six issue areas for which project impacts were identified. The Reduced Operations Alternative would result in fewer impacts than the proposed project related to one of the eight issue areas, and would result in similar impacts as the proposed project for the remaining seven issue areas for which project impacts were identified. However, under both the Reduced Height Alternative and the Reduced Operations Alternative, the significant and unavoidable impacts related to aesthetics and transportation, which were identified for the proposed project, would still occur.

Based on the above, because the Reduced Operations Alternative is reasonably anticipated to result in fewer impacts than the proposed project related to one of the eight issue areas, and would result in similar impacts as the proposed project for the remaining seven issue areas for

which project impacts were identified, as compared to the Reduced Height Alternative, which would result in greater impacts to six issue areas, the Reduced Operations Alternative would be considered the Environmentally Superior Alternative. However, as discussed above, the significant and unavoidable impacts related to aesthetics and transportation that were identified for the proposed project would still occur under the Reduced Operations Alternative, though VMT would substantially decrease (note: the analysis determined that there would still be an increase of 0.014% in VMT which exceeds the County's VMT threshold). As such, the number of significant and unavoidable impacts overall would be the same under the Reduced Operations Alternative and the proposed project.

2.5 AREAS OF KNOWN CONTROVERSY

Areas of controversy that were identified in NOP comment letters, and are otherwise known for the project area, include the following:

- Maintaining the rural aesthetic of the area;
- Increase in light and glare within surrounding residential areas;
- Scenic Corridor preservation;
- Project compliance with Ridgeline Protection and County design policies;
- Violation of a Williamson Act Contract;
- Increases in air quality emissions and impacts to climate change;
- Biological impacts associated with wildlife and plant habitats;
- Impacts upon cultural, historical, or tribal resources at the project site;
- Preservation of historic roads;
- Seismic hazards;
- Soil capability of supporting the use of septic tanks;
- Increased stormwater runoff causing soil erosion, flooding, or pollution;
- Use of pesticides, fungicides, and herbicides;
- Redesignation of agricultural zoning;
- Incongruity of industrial/retail use with agricultural and rural residential surroundings;
- Noise increases;
- Increased need for police enforcement;
- Traffic increases along existing surrounding roadways; and
- Suitability of access roads.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4. Aesthetics			
4-1 Have a substantial adverse effect on a scenic vista.	LS	*None required.*	N/A
4-2 In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	S	*4-2 In conjunction with submittal of improvement plans or building permit plan, the project applicant shall submit a Final Landscape Plan. The Final Landscape Plan shall include, but not necessarily be limited to, the following:* • *Additional plantings along the project's Callison Road frontage, while maintaining sight distance requirements at the project driveways. The plantings shall include a mix of trees and shrubs, the species and size of which shall be determined by the Placer County Community Development Resource Agency;* • *A living façade on floors 2-4 of the octagon building that includes plants that are native, or native-appearing and drought-tolerant;* • *Structural materials and colors on the upper portion of the octagon building shall be representative of the surrounding oak woodland vegetation; and* • *Retention of existing oak woodlands on the slope in front of the octagon building for screening purposes. If any of this screening vegetation is damaged during construction, replacement landscaping including native, or native-appearing and drought-tolerant*	SU

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		vegetation; shall be planted to the satisfaction of the Placer County Community Development Resource Agency. *The Final Landscape Plan shall be subject to review and approval by Placer County Community Development Resource Agency.*	
4-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	S	*4-3* *Prior to Improvement Plan approval, the project applicant shall submit a lighting plan for the project to Placer County Planning Services for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:* • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;* • *Place and shield or screen area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas;* • *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
				finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting adjacent properties.	
4-4	**Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the HBPCP and BRSP areas.**	CC	*4-4*	*Implement Mitigation Measure 4-2.*	SU
4-5	**Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the HBPCP and BRSP areas.**	CC	*4-5*	*Implement Mitigation Measure 4-3.*	LCC
5. Agriculture and Forestry Resources					
5-1	**Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.**	NI	*None required.*		N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
5-2	**Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy.**	LS	*None required.*	N/A
5-3	**Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]), or result in the loss of forest land or conversion of forest land to non-forest use.**	LS	*None required.*	N/A
5-4	**Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.**	LS	*None required.*	N/A
5-5	**Conflict with General Plan or other policies regarding land use buffers for agricultural operations.**	LS	*None required.*	N/A
5-6	**Involve changes in the existing environment which, due to their location or nature, could**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	cumulatively result in loss of Farmland to non-agricultural use.			
5-7	**Involve changes in the existing environment which, due to their location or nature, could cumulatively result in loss of forest land.**	LCC	*None required.*	N/A
	6. Air Quality and Greenhouse Gas Emissions			
6-1	**Conflict with or obstruct implementation of the applicable air quality plan during project construction.**	LS	*None required.*	N/A
6-2	**Conflict with or obstruct implementation of the applicable air quality plan during project operation.**	LS	*None required.*	N/A
6-3	**Expose sensitive receptors to substantial pollutant concentrations.**	LS	*None required.*	N/A
6-4	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**	LS	*None required.*	N/A
6-5	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air**	LCC	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
	quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).				
6-6	**Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**	LCC	*None required.*		N/A
	7. Biological Resources				
7-1	**Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications.**	LS	*None required.*		N/A
7-2	**Impacts to special-status wildlife species either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.**	S	*7-2*	*Construction activities, such as vegetation clearing and grading activities, shall be completed between September 1 and February 1, if feasible, to avoid impacts to suitable nesting habitat during the typical nesting season. If vegetation removal and grading activities must occur during the nesting season (February 1 to August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, at most, three (3) days prior to*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the initiation of construction. If a break in construction activity of more than two (2) weeks occurs, then subsequent surveys shall be conducted. *If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The foregoing non-disturbance buffers may be reduced if a smaller buffer is proposed by the project biologist and approved by Placer County after taking into consideration the natural history of the species of nesting bird, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (if visual or acoustic barriers are located between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.* *A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency within 30 days of the completed survey and is valid for one construction season. If nests are not found, further mitigation shall not be required.*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Should construction activities cause a nesting bird to exhibit any signs of distress (e.g., vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest), then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged, or as otherwise determined by a qualified biologist in consultation with the County. *Construction activities may only resume within the buffer zone after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) is inactive, and that new nests have not been identified.*	
7-3 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS, or on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	S	*7-3(a)* *PCCP General Condition 1. Prior to Improvement Plan approval, the project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.*	LS

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following best management practices (BMPs). This list shall be included on the notes page of the Improvement Plan and Grading Plan and shall be shown on the plans: 1. *When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to PCCP Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).* 2. *Trash generated by Covered Activities shall be promptly and properly removed from the site.* 3. *Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on-site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		a. Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians. *b. Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification shall be properly maintained until construction is completed and the soils have been stabilized.* *c. Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.* *d. Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (http://www.cal-ipc.org/paf/) but shall be composed of*	

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Summary of Impacts and Mitigation Measures

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		native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives. *4. If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated stormwater filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar low impact development (LID) features to capture and treat flows, shall be installed consistent with local programs and ordinances.* *7-3(b) <u>PCCP Community Condition 2.1</u>. To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.* *7-3(c) Because the roadside ditch may be considered jurisdictional under CFGC Section 1600, the only way to determine whether the feature is jurisdictional under CFGC Section 1600 is to submit a Streambed Alteration Agreement Notification (Notification) to*	

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		CDFW. Submittal of Notification would either result in a letter from CDFW stating a Streambed Alteration Agreement (Agreement) is not required, or issuance of an Agreement. *Prior to commencement of ground disturbing activities, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for any impacts to aquatic features with a bed and/or bank, or riparian habitat associated with a CDFW jurisdictional aquatic resource. The information provided shall include a description of all of the activities associated with the project, not just those closely associated with the drainages and/or riparian vegetation. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided, as well as a description of stormwater treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific stormwater BMPs.*	

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		Mitigation may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. *7-3(d) To address potential impacts to federally or State-protected wetlands, prior to the issuance of grading permits, the project applicant shall complete the following requirement:* • *The project applicant shall submit the Aquatic Resources Delineation (ARD) to the USACE and RWQCB to determine if the roadside ditch is subject to USACE and/or RWQCB jurisdiction. If the roadside ditch is deemed non-jurisdictional by USACE and RWQCB, no further mitigation shall be required. If, on the other hand, the ditch is subject to USACE and/or RWQCB jurisdiction, then the applicant shall comply with applicable PCCP Conditions related to impacts to aquatic resources, as determined by the Placer Conservation Authority (PCA) and the Community Development Resource Agency.* *7-3(e) <u>CARP Authorization Conditions</u>: During project construction activities, all work within the project plan area that impacts aquatic resources of Placer*	

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		County shall be completed according to the plans and documents included in the CARP application, Water Quality Certification, and, if applicable, WDRs. All changes to those plans shall be reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, WDRs. Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required. *A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the project site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available on-site at all times for review by site personnel and agencies.* *Any construction within the stream system shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other aquatic resources of Placer County, and the stream zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.*	

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		Before beginning construction, the project applicant must have a valid CARP authorization or waiver notice. In order to obtain a permit, the applicant must pay all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank. *All deviations from plans and documents provided with the application and approved by Placer County Community Development Resource Agency must be reported to Placer County Community Development Resource Agency immediately.* *Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.* *All required setbacks shall be implemented according to PCCP Condition 4 (see PCCP Section 6.1.2).*	

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		Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1, prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at the Placer County Community Development Resource Agency's discretion and shall require surveys by a qualified biologist to determine the absence of nesting birds, prior to the activity. *Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. Such materials shall be placed a minimum of 50 feet away from aquatic environments. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency, which shall then immediately notify the appropriate State and federal agencies.* *During construction, litter or construction debris shall not be dumped into water bodies or other aquatic resources; nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.*	

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		Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that may be used in the project area shall be submitted to the Placer County Community Development Resource Agency before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity. *The Placer County Community Development Resource Agency shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. The Placer County Community Development Resource Agency shall suspend work and notify the USFWS, NMFS, and the CDFW for guidance.* *Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.* *All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.*	

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		At the end of each workday, all open trenches shall be provided with a ramp of dirt or wood to allow trapped animals to escape. *If human remains or cultural artifacts are discovered during construction, the applicant shall stop work in the area and notify the Placer County Community Development Resource Agency immediately. Work shall not continue in the area until the County Coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.* *7-3(f)* *PCCP Community Condition 1.2. After receiving a PCCP Certificate of Authorization and prior to construction, the project shall retain a qualified professional to temporarily stake non-vernal pool wetlands and their buffer that will be avoided to ensure construction equipment and personnel completely avoid such features. A note to such effect shall be shown on the Improvement Plans or Grading Plans and the location of temporary fencing demonstrated on the plans. Once installed, the applicant shall notify the PCA and the County of the temporary fencing and provide photographs as evidence of the installation. The fencing shall remain in place for the duration of ground-disturbing activities.*	

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7-4	**Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.**	LS	*None required.*		N/A
7-5	**Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands.**	S	*7-5*	*PCCP General Condition 3. Prior to Improvement Plan approval, the project shall pay a land conversion fee or dedicate land in lieu of a fee or a combination thereof for the permanent conversion of approximately 5.9 acres of natural land cover, including 4.2 acres of oak woodland and 1.7 acres of annual brome grassland. If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the amount of land disturbance resulting from the activity.*	LS
7-6	**Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.**	S	*7-6(a)*	*PCCP General Condition 5. Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, State and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological*	LS

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		resources and regulatory protections, to construction personnel prior to initiation of construction work. *7-6(b) Implement Mitigation Measures 7-3(a), 7-3(b), 7-3(e), 7-3(f), and 7-5.*	
7-7 Cumulative loss of habitat for special-status species.	LCC	*None required.*	N/A
8. Cultural Resources			
8-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.	LS	*None required.*	N/A
8-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines Section 15064.5.	S	*8-2(a) Prior to initiation of ground-disturbing activities, a qualified archaeologist shall conduct a short awareness training session for all construction workers and supervisory personnel. The course shall explain the importance of, and legal basis for, the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event cultural resources or human remains/burials are uncovered during construction activities, including work curtailment or redirection and to immediately contact their supervisor and the archaeological monitor. The worker education session shall include visuals of artifacts (prehistoric and historic) that might be found in the project vicinity, and take place on the construction site immediately prior to the start of construction. Documentation of the training (i.e., a*	LS

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		sign-in sheet) shall be retained at the site and shall be submitted with applicable reports to the Placer County Community Development Resource Agency.	
		8-2(b) If cultural resources are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologists, as well as a tribal representative from the United Auburn Indian Community will be called to evaluate the significance of the find. Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the National Register of Historic Places/State Register and the tribal representative and County staff have coordinated regarding the find. If a potentially-eligible resource is encountered, then the archaeologist, Placer County, and the United Auburn Indian Community (UAIC) will arrange for either 1) total avoidance of the resource, if possible; 2) test excavations or total data recovery; or 3) other alternative forms of mitigation. The determination shall be formally documented in writing and submitted to the Placer County as verification that the provisions in CEQA for managing unanticipated discoveries have been met.	

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8-3	**Disturb any human remains, including those interred outside of dedicated cemeteries.**	S	*8-3*	*The following language shall be noted on the project improvement plans, subject to review and approval by the Placer County Community Development Resource Agency:* *If articulated or disarticulated human remains are encountered on the proposed project site during construction activities, all work within 100 feet of the find must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Placer County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC.*	LS
8-4	**Have the potential to cause a physical change which would affect unique ethnic cultural**	S	*8-4*	*Implement Mitigation Measure 17-1.*	LS

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	values, or restrict existing religious or sacred uses within the potential impact area.			
8-5	**Cause a cumulative loss of cultural resources.**	LS	*None required.*	N/A
	9. Energy			
9-1	**Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction.**	LS	*None required.*	N/A
9-2	**Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project operations.**	LS	*None required.*	N/A
9-3	**Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**	LS	*None required.*	N/A
9-4	**Result in cumulative energy impacts.**	LS	*None required.*	N/A
	10. Geology and Soils			
10-1	**Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving**	LS	*None required.*	N/A

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	rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides.				
10-2	**Result in substantial soil erosion or the loss of topsoil.**	S	*10-2(a)*	*Prior to construction commencing, the applicant shall provide evidence to the ESD of a Waste Discharge Identification (WDID) number generated from the State Regional Water Quality Control Board's Stormwater Multiple Application & Reports Tracking System (SMARTS). This serves as the Regional Water Quality Control Board approval or permit under the National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit.*	LS
			10-2(b)	*The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the requirements of Section II of the Land Development Manual (LDM) that are in effect at the time of submittal) to the Engineering and Surveying Division (ESD) for review and approval of each project phase. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and offsite. All existing and proposed utilities and easements, onsite and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at*	

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		intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and Placer County Fire Department improvement plan review and inspection fees with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans. *Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.* *Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the Engineering and Surveying Division.* *Prior to the County's final acceptance of the project's improvements, submit to the Engineering and Surveying Division one copy of the Record Drawings in digital format (on compact disc or other acceptable*	

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		media) along with one blackline hardcopy (black print on bond paper) and one PDF copy. The digital format is to allow integration with Placer County's Geographic Information System (GIS). The final approved blackline hardcopy Record Drawings will be the official document of record. *10-2(c) The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee. All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the ESD concurs with said recommendation.* *The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before,*	

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		during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD. *The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded to the project applicant or authorized agent.* *If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the Development Review Committee/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the Development Review Committee/ESD to make a determination of*	

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		substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.	
10-3 Be located on a geological 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, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	S	*10-3 The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;* *B. Structural foundations, including retaining wall design (if applicable);* *C. Grading practices;* *D. Erosion/winterization;* *E. Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, potential for smectite clays etc.); and* *F. Slope stability.* *Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.* *If the geotechnical engineering report indicates the presence of critically expansive or other soil problems*	

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			that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required prior to issuance of Building Permits. This requirement shall be so noted on the Improvement Plans.	
10-4	**Have soils incapable of supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.**	LS	*None required.*	N/A
10-5	**Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**	LS	*None required.*	N/A
10-6	**Result in significant disruptions, displacements, compaction or overcrowding of the soil, or substantial change in topography or ground surface relief features.**	S	*10-6 Implement Mitigation Measures 10-2(b), 10-2(c), and 10-3.*	LS
10-7	**Cumulative increase in the potential for geological related impacts and hazards.**	LS	*None required.*	N/A
11. Hazards and Hazardous Materials				
11-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**	LS	*None required.*	N/A

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11-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	LS	*None required.*	N/A
11-3 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials.	LS	*None required.*	N/A
12. Hydrology and Water Quality			
12-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	S	*12-1 Implement Mitigation Measures 10-2(a) through 10-2(c).*	LS
12-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.	S	*12-2(a) Implement Mitigation Measures 10-2(a) and 10-2(b).* *12-2(b) The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development / Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD)).*	LS

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		Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the Engineering and Surveying Division (ESD). BMPs shall be designed in accordance with the East Placer Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals. *All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Contractual evidence of a monthly parking lot sweeping and vacuuming, and catch basin cleaning*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		program shall be provided to the ESD upon request. Failure to do so will be grounds for discretionary permit revocation. Prior to Improvement Plan approval or Final Subdivision Map recordation, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance. *12-2(c) The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and bio-retention planters within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek." or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD).* *ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The property owner is responsible for maintaining the legibility of stamped messages and signs.* *12-2(d) This project is located within the permit area covered by Placer County's Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System [NPDES]). Project-related storm*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		water discharges are subject to all applicable requirements of said permit. *The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.* *The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual.* *12-2(e) According to the State of California NPDES Phase II MS4 Permit, this project is a Regulated Project that creates and/or replaces 5,000 square feet or more of impervious surface. A final Stormwater Quality Plan (SWQP) shall be submitted, either within the final Drainage Report or as a separate document that identifies how this project will meet the Phase II MS4 permit obligations. Site design measures, source control measures, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the Improvement*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Plans. In addition, pursuant to the Phase II MS4 permit, projects creating and/or replacing one acre or more of impervious surface are also required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2 year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, and other LID measures that result in post-project flows that mimic pre-project conditions. *12-2(f) Prior to final occupancy, the applicant shall provide evidence to Placer County Environmental Health Department of compliance with the SWRCB general Waste Discharge Requirements (WDRs) for wineries with activities related to producing wine or grape juice that generate winery waste and discharge process water for reuse or disposal as applicable.*	
12-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
	sustainable groundwater management plan.				
12-4	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff either during construction or in the post-construction condition.**	S	*12-4(a)*	*As part of the Improvement Plan submittal process, the preliminary drainage report provided during environmental review shall be submitted in final format. The final drainage report may require more detail than that provided in the preliminary report, and will be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and off-site improvements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures. The final Drainage Report shall be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of Improvement Plan submittal.*	LS
			12-4(b)	*The Improvement Plan submittal and final Drainage Report shall provide details showing that storm water run-off peak flows shall be reduced to pre-project conditions through the installation of detention facilities. Detention facilities shall be designed in*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		accordance with the requirements of the Placer County Stormwater Management Manual that are in effect at the time of submittal, and to the satisfaction of the Engineering and Surveying Division (ESD) and shall be shown on the Improvement Plans. The ESD may, after review of the project's final Drainage Report, delete this requirement if it is determined that drainage conditions do not warrant installation of this type of facility. Maintenance of detention facilities by the property owner shall be required. No detention facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals. *12-4(c) This project is subject to the one-time payment of drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Article 15.32, Placer County Code). The current estimated development fee is $24,246 ($1,350 per acre for commercial development within the Antelope Creek zone), payable to the Engineering and Surveying Division prior to Building Permit issuance. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete.* *12-4(d) This project is subject to payment of annual drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Chapter 15, Article*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		15.32, Placer County Code). Prior to Building Permit issuance, the applicant shall cause the subject property to become a participant in the existing Dry Creek Watershed County Service Area for purposes of collecting such annual assessments. The current estimated annual fee is $5,118.60 ($285 per acre for commercial development within the Antelope Creek zone).	
12-5 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns.	LCC	*None required.*	N/A
13. Land Use and Planning			
13-1 Physically divide an established community.	LS	*None required.*	N/A
13-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LS	*None required.*	N/A
13-3 Result in the development of incompatible uses and/or the creation of land use conflicts.	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

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13-4 Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration.	LS	*None required.*	N/A
14. Noise			
14-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LS	*None required.*	N/A
14-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	LS	*None required.*	N/A
14-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LS	*None required.*	N/A
14-4 Generation of a substantial permanent increase in ambient noise levels associated with	LCC	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	the proposed project in combination with cumulative development.			
	15. Public Services and Utilities			
15-1	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.**	LS	*None required.*	N/A
15-2	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services.**	LS	*None required.*	N/A

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
15-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for schools, parks, or other government services; or result in an increase in 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	LS	*None required.*	N/A
15-4 Result in substantial adverse physical impacts associated with the provision of new or	LS	*None required.*	N/A

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Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services.			
15-5	**Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**	LS	*None required.*	N/A
15-6	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**	LS	*None required.*	N/A
15-7	**Result in a determination by the wastewater treatment**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.			
15-8	**Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.**	LS	*None required.*	N/A
15-9	**Cumulative impacts to public services.**	LS	*None required.*	N/A
15-10	**Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout in the HBPCP and BRSP areas.**	LCC	*None required.*	N/A
	16. Transportation			
16-1	**Conflict with a program, plan, ordinance, or policy, except LOS, addressing the**	S	*16-1 Prior to the commencement of construction, a construction signage and traffic control plan shall be provided to the Engineering and Surveying Division*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
circulation system during construction activities.		*for review and approval. The construction signing and traffic control plan shall include (but not be limited to) items such as:* • *Guidance on the number and size of trucks per day entering and leaving the project site;* • *Identification of arrival/departure times that would minimize traffic impacts;* • *Approved truck circulation patterns;* • *Locations of staging areas;* • *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;* • *Methods for partial/complete street closures (e.g., timing, signage, location, and duration restrictions);* • *Criteria for use of flaggers and other traffic controls;* • *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;* • *Monitoring for roadbed damage and timing for completing repairs;* • *Limitations on construction activity during peak/holiday weekends and special events;* • *Preservation of emergency vehicle access;* • *Coordination of construction activities with construction of other projects that occur concurrently in the HBPCP/unincorporated*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		County to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs); • *Removing traffic obstructions during emergency evacuation events; and* • *Providing a point of contact for nearby residents to obtain construction information, have questions answered, and convey complaints.* *The construction signage and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.* • *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant.* • *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*	
16-2 Conflict with a program, plan, ordinance, or policy, except	LS	*None required.*	N/A

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Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
	LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations.				
16-3	**Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**	S	*16-3*	*Prior to the approval of improvement plans for Phase 2 of the Project or within three years of occupancy of Phase 1, whichever occurs first, the project applicant shall install a left-turn lane on Taylor Road at the Callison Road intersection to the satisfaction of the Placer County Department of Public Works.*	LS
16-4	**Result in inadequate emergency access or access to nearby uses.**	LS	*None required.*		N/A
16-5	**Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).**	S	*16-5(a)* *16-5(b)* *16-5(c)*	*During project operation, the project applicant shall distribute to employees and guests information regarding the availability of Placer Transit service in the project vicinity. Proof demonstrating compliance with this measure shall be submitted to the Placer County Community Development Resource Agency upon request.* *During project operation, the project applicant shall provide an employee carpool matching service. Proof demonstrating compliance with this measure shall be submitted to the Placer County Community Development Resource Agency upon request.* *Prior to approval of improvement plans for the phase containing the octagon building, the plans shall*	SU

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		provide an on-site location for guest bus parking within the dedicated parking area. Final parking lot design shall be to the satisfaction of the Placer County Community Development Resource Agency.	
		16-5(d) *During project operation, the project applicant shall encourage organizers of special events, or corporate type agricultural promotional events to carpool.*	
17. Tribal Cultural Resources			
17-1 **Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074.**	S	*17-1* *The following language shall be noted on project Improvement Plans, subject to review and approval by the Placer County Community Development Resource Agency:* *If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.* *A qualified cultural resources specialist and Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate*	LS

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts. The UAIC does not consider curation of tribal cultural resources to be appropriate or respectful and requests that materials not be permanently curated, unless specifically requested by the Tribe. *If articulated or disarticulated human remains are discovered during construction activities, the County Coroner and Native American Heritage Commission shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.* *Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.	
17-2 Cause a cumulative loss of tribal cultural resources.	LS	*None required.*	N/A
18. Wildfire			
18-1 Substantially impair an adopted emergency response plan or emergency evacuation plan.	LS	*None required.*	N/A
18-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	S	*18-2 In conjunction with the submittal of and prior to the approval of Improvement Plans, the applicant shall submit a Vegetation Management Plan (VMP) for review and approval by CAL FIRE, PFPD, PCFD, and Placer County Community Development Resource Agency. The VMP shall identify roles, responsibilities, and financial resources to ensure successful implementation. The VMP shall be implemented by the project developer and maintained in perpetuity by the winery owner and*	LS

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation

		may include, but not necessarily be limited to, the following:
		
		• *Management of Vegetation During Project Construction or Adjacent Construction:*
		  ○ *Prior to construction activities, all vegetated boundaries shall be designated by placing high visibility construction fencing and/or silt fencing. Fencing shall be maintained in good condition until permanent post and cable fencing can be installed.*
		• *Vegetation Maintenance*
		  ○ *Ongoing Fuel Load Management activities shall focus on areas close to structures or on borders, as approved by the County, and include activities to mow or otherwise manage annual grasses, remove dead and/or diseased trees, snags, and debris, limb live trees up to a height of 10 feet above ground where feasible, and remove understory fuels over one foot in height, where feasible. The use of goats shall be the preferred method of reducing vegetation materials; alternative methods, such as plastic string weed trimmers or other County-approved equipment may be*	

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		acceptable, but shall be limited to the maximum extent feasible. Chipping of material shall be permitted. Chipped material shall be removed from the site unless otherwise approved by the County. Prescribed burning shall be prohibited and herbicide use shall not be allowed within the fuel load reduction area; and ○ *Annual monitoring memos shall be submitted to the County by June 30 of each year. The memos shall include, at a minimum, the following:* ▪ *An assessment of dead vegetative matter (thatch) and management recommendations, if needed; and* ▪ *An evaluation of general site conditions and recommendations for remedial fuel reduction actions to be included in the annual monitoring memo.*	
18-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate	LS	*None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	fire risk or that may result in temporary or ongoing impacts to the environment.			
18-4	**Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.**	LS	*None required.*	N/A
18-5	**Increase in wildfire risk attributable to the proposed project, in combination with cumulative development.**	LS	*None required.*	N/A

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3. Project Description

3. PROJECT DESCRIPTION

3.1 INTRODUCTION

The Project Description chapter of the EIR provides a comprehensive description of the Project 8 Winery Project (proposed project) in accordance with CEQA Guidelines Section 15124. A detailed description of the project location, project setting and surrounding uses, project objectives, project components, and required project approvals is presented below.

3.2 PROJECT LOCATION

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The proposed project would be located on portions of several parcels consisting of Assessor's Parcel Numbers (APNs) 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The proposed project site, or improvement area, consists of approximately 18 acres of the 44.14-acre parcel area. The project site is surrounded by oak woodlands and scattered rural residences, with Union Pacific Railroad (UPRR) tracks to the north and south. Access to the site is provided by Callison Road, which forms the southern boundary of the project site. The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. The Placer County General Plan designates the site as Rural Residential (1-10 Acre Minimum and 2.3-4.6 Acre Minimum); the site is zoned Farm Building 20-Acre Minimum (F-B-X 20) and Residential Agricultural Building 100,000-square-foot Minimum (RA-B-100).

3.3 PROJECT SETTING AND SURROUNDING LAND USES

Section 15125 of the CEQA Guidelines requires an EIR to include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation (NOP) is published, from a local and regional perspective. Knowledge of the existing environmental setting is critical to the assessment of environmental impacts. Pursuant to CEQA Guidelines Section 15125, the description of the environmental setting shall not be longer than necessary to understand the potential significant effects of the project.

The following sections describe the existing setting of the project site and the surrounding land uses in the project vicinity. Please note that detailed discussions of the existing setting in compliance with CEQA Guidelines Section 15125, specific to each environmental resource area, are included in each corresponding technical chapter of this EIR.

Site Characteristics

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County (see Figure 3-1). The proposed project would be located on portions of several parcels consisting of APNs 031-220-061, 032-124-080, and 032-124-044, totaling 44.14 acres. The southerly portion of the project site, through which the proposed access road would meander, is located within the Horseshoe Bar/Penryn Community Plan (HBPCP) area.

Figure 3-1
Regional Project Location



The remaining portion of the project site, on which the winery facilities would be located, is outside of the HBPCP area. The Placer County General Plan designates the northerly APN (031-220-061) as Rural Residential (1-10 Acre Minimum), while the two parcels within the HBPCP area are designated by the HBPCP as Rural Residential (2.3-4.6 Acre Minimum), consistent with the Placer County General Plan. The northerly parcel is zoned F-B-X (Farm combining 20-Acre Minimum); and the remaining parcels are zoned RA-B-100 (Residential Agricultural combining 4.6-Acre Minimum). Roadways in the immediate project vicinity include Callison Road, which forms the southern boundary of the project site, Ridgeview Lane to the west, and Taylor Road to the east, approximately 0.3-mile from the project site. Interstate 80 (I-80) is located approximately 1.5 miles to the east. Two UPRR tracks pass through the project area, with one track bordering the northern site boundary and the other track bordering the southern site boundary. The spurs are used to move UPRR freight trains and Amtrak passenger trains.

The 17.96-acre project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The Antelope Canal, owned by Placer County Water Agency (PCWA), traverses the entire property from east to west and is fed by the Dutch Canal. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. Site elevation ranges from approximately 700 feet to 950 feet. Historically, the project site has been used for agricultural purposes (e.g., cattle grazing), though available evidence suggests that the agricultural activities did not cover the site entirely and appear to have tapered off between the early 1950s and mid-1960s. A small group of cattle are currently grazing the northern portion of the project site within the oak woodland. A single-family residence, which is still currently in use, was constructed on the lower parcel in 1973.

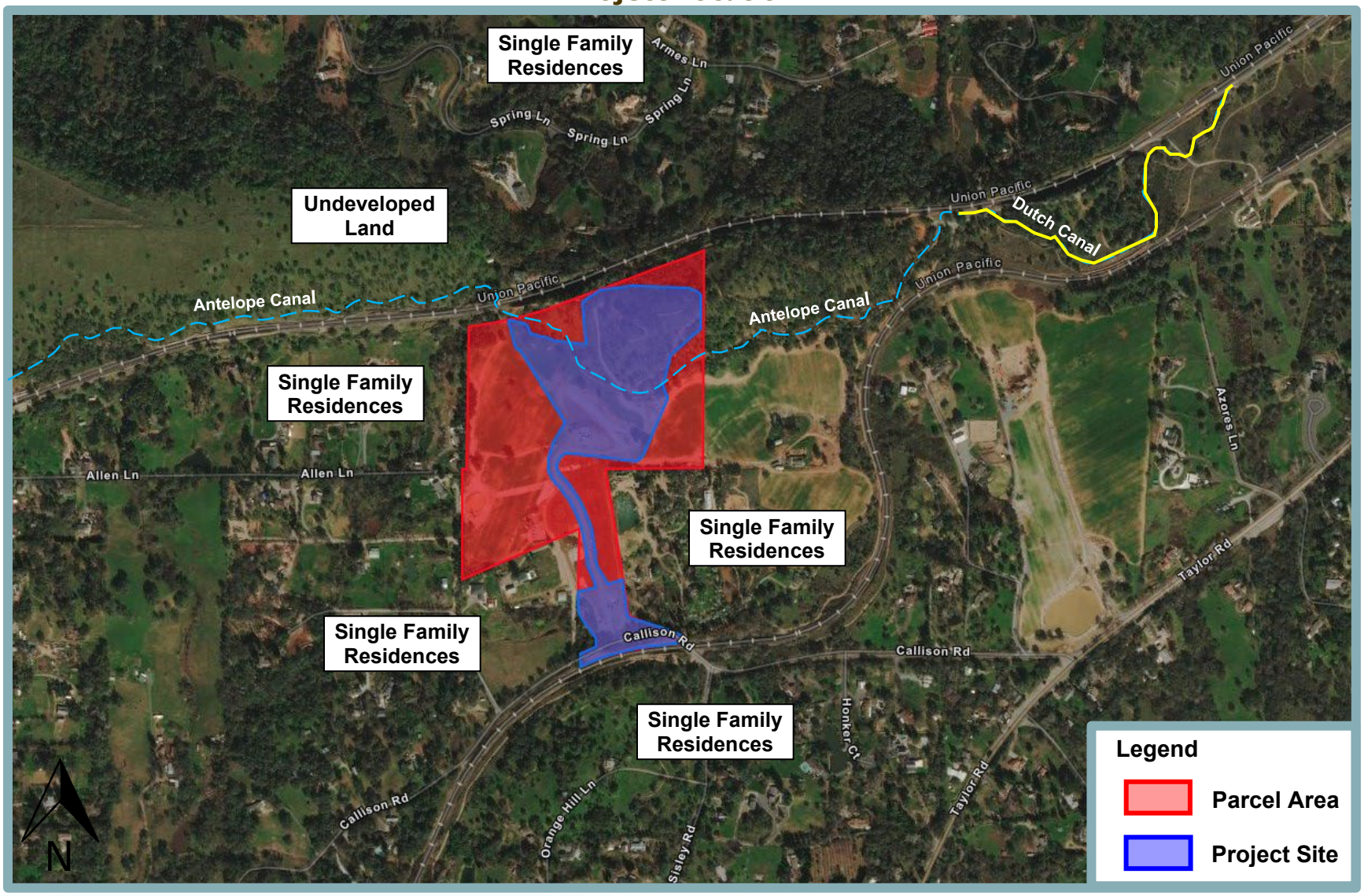
Surrounding Land Uses

The project site is located within a rural residential area of Placer County. The current zoning of adjacent properties is a mixture of RA-B-100, F-B-X 4.6-Acre Minimum, and F-B-X 20-Acre Minimum. Other than undeveloped land to the north, the project site is surrounded by scattered single-family residences (see Figure 3-2).

A more detailed breakdown of the land uses adjacent to the project site is as follows:

- **North:** Land uses to the north of the project site include UPRR railroad tracks, beyond which is undeveloped land and single-family rural residential homes (103, 113 Spring Lane, 7850, 7880, 7890, and 7895 Armes Lane, 420 Skyview Drive). The current zoning designation of the land to the north of the project site is F-B-X 4.6-Acre Minimum.
- **South:** Land uses to the south of the project site include rural residences (7541 Ridgeview Lane and 7585, 7685 Callison Road), Callison Road, and UPRR railroad tracks, beyond which are rural residences (1203, 1366 Sisley Road, 7880, 7945 Callison Road). The current zoning designation of the land to the south of the project site is RA-B-100 2.3-Acre Minimum.
- **East:** Land uses to the east of the project site include rural residences (7665 Callison Road), beyond which are UPRR railroad tracks. The current zoning designation of the land to the east of the project site is F-B-X 20-Acre Minimum.
- **West:** Land uses to the west of the project site include rural residences (7429 Allen Lane, 7450, 7455 Ridgeview Lane). The current zoning designation of the land to the east of the project site is RA-B-100 2.3-Acre Minimum.

Figure 3-2
Project Location



3.4 PROJECT OBJECTIVES

The following project objectives have been developed by the project applicant:

1. The Winery

Construct and operate an economically viable high-end winery capable of producing over 50,000 cases of top-quality wine varietals annually, using both wine grapes grown in Placer County on the project's adjacent vineyards that possess historically productive soil, and wine grapes sourced from the best varietal vineyards in other regions of California.

2. The Facility

Integrate processing facilities into the site topography and develop a cave complex to reduce the above-ground winery footprint and provide optimum cellar conditions for wine processing and storage (e.g., temperature and humidity).

3. The Technology

Optimize unique and energy efficient gravity flow processing to preserve the ideal molecular structure of the wine or minimize oxidation with the integration of the latest optical sorting technologies, data measuring, and fermenting methods to consistently produce high quality wine on-site and preserve operational flexibility.

4. Tasting and Dining, the Experience

Provide on-site wine tasting, offered daily, and carefully crafted food and wine pairings in an iconic tasting/dining room with spectacular views of winery vineyards and the surrounding areas of Placer County in order to create memorable experiences for visitors and elevate Placer County as an agri-tourism destination.

5. The Events

Host Agricultural Promotional Events that showcase the wine, vineyards, innovative winemaking technology, as well as other locally farmed products and host Special Events which, combined with the Agricultural Promotional Events, will contribute to Placer County's efforts to meet its goals of supporting the local agricultural industry and generating positive economic impacts through agricultural land uses.

6. The Environment

Develop an environmentally sustainable project through responsible sizing, energy saving initiatives, reduced water consumption, industry leading reuse technologies, and solar energy production.

3.5 PROJECT COMPONENTS

The proposed project would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave network, an accessory restaurant, and other associated facilities, on 17.96 acres of the 44.14-acre parcel area (see Figure 3-3 through Figure 3-5). The proposed project components, along with all required entitlements and approvals, are described in the following sections.

Figure 3-3
Site Plan

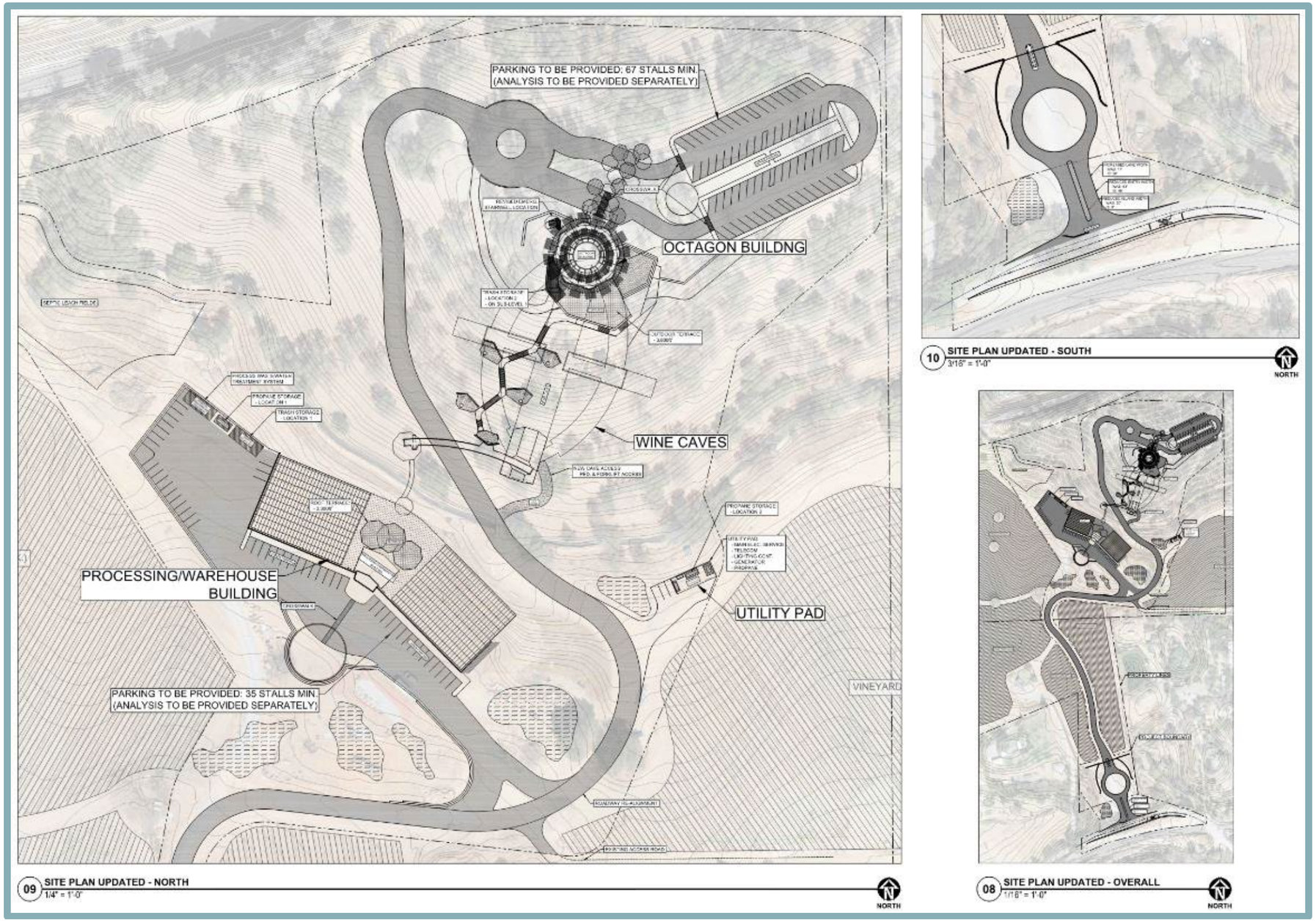


Figure 3-4
Illustration of Project Entry and Proposed Winery Features



Figure 3-5
Illustration of Proposed Winery Features (e.g., Processing/Warehouse Building and Octagon Building)



It is important to note that "crop production" associated with the existing vineyards within the 44.14-acre parcel area is an existing use allowed by right under the property's current zoning designations of F-B-X 20-Acre Minimum and RA-B-100 (see County Code Sections 17.10.010[B] and 17.44.010[B]). Crop production is defined in Section 17.04.030 as crop preparation services and harvesting activities including, but not limited to, mechanical soil preparation, irrigation system construction, spraying, crop processing, and sales of the agricultural crop only. As a result, the analysis included in this EIR is not required to evaluate the effects of the existing vineyard's crop production and harvesting operations.

Proposed Development

The following provides a description of the proposed on-site development.

Octagon Building

The octagon building would total 29,250 square feet (sf) and would consist of a sub-level as well as five above-ground levels, reaching a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view). The building would sit atop the hill located in the northern portion of the project site in order to allow for gravity filtration down to the wine cave level, as well as to provide views overlooking the existing vineyards below (see Figure 3-6). The exterior of the building would include a living façade comprised of an exoskeletal structure covered with plant life to blend in with the surrounding environment. A minimum of 67 surface parking stalls would be included atop the hill for use by patrons of the octagon building, including Americans with Disabilities Act (ADA)-compliant parking stalls. A portion of this parking area would be covered by solar canopies.

The sub-level would be approximately 20 feet below grade and would total 8,000 sf. The sub-level would house the upper intake grape sorting, miscellaneous utility systems for potable water, and a refrigerated area for temporary storage of incoming grapes.

Level one would be located at ground level and would serve as the primary entry for the octagon building. Level one would cover 5,600 sf, including a restroom and a 1,900-sf administration area. Level one would also include a porte cochère where wine could be picked up by patrons. The porte cochère would serve as the point of entry to the reception area where two elevators and a stairway would be provided for access to the upper levels, the below-grade processing level, and the wine caves. A 3,600-sf outdoor terrace would also be accessible from level one.

Levels two and three would be approximately 3,700 sf each. Level two would consist of an on-site residential unit, while level three would contain a commercial kitchen, storage, and patron restrooms.

The fourth above-ground level would be comprised of a tasting room and accessory restaurant. A portion of level four would be located on a turntable, which would slowly rotate 360 degrees every 45 minutes. Level four would be circular in shape and approximately 4,750 sf. Of the 4,750 sf, 950 sf along the outer perimeter of the circular floor area would be dedicated to emergency egress and 800 sf in the center of the floor area would be used for the primary ingress/egress from the elevators and stairwell. A separate elevator would be provided for staff use only that would connect the kitchen on level three to levels four and five.

Figure 3-6
Cross-Section View of Octagon Building



The remaining 3,000 sf would be divided between a 600-sf wine tasting bar, a 250-sf dedicated restaurant counter, and on the turn table, a 1,425-sf tasting and agricultural event area, and a 725-sf dedicated accessory restaurant area with 32 seats. Please refer to the below discussion for more details of the accessory restaurant.

The top 15 feet of the structure and final level (level five) would be 3,500 sf and would primarily be used to facilitate gravity filtration of the wine during processing. Gravity filtration would be carried out by bringing the unfinished wine to the top level in 550-gallon vessels and allowing the wine to flow down to the level of the wine caves (approximately 160 feet), which would create the necessary pressure (70 pounds per square inch [psi]) for the wine to be filtered, when necessary, without the use of pumps, thus preserving the ideal molecular structure of the wine. Additionally, a private tasting room to be called the "550 Room", totaling 550 sf, would be located on level five.

Pursuant to Section 17.44.010 and Section 17.10.010 of the Placer County Code, the maximum allowable building height for the project site is 36 feet. Therefore, the proposed project would require a Zoning Text Amendment adding the following language to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330(E), Development and Operational Standards:

> **Height Limit Exceptions.** Notwithstanding the Site Development Standards for the applicable zone or Section 17.54.020 (Height limits and exceptions), a structure for a winery, tasting room, or accessory use-restaurant under this section may exceed the prescribed height limit for the applicable zone if the additional height is authorized through a conditional use permit (CUP) process that includes an analysis of visual impacts including photo simulations.

The Zoning Text Amendment would allow the octagon building to be built at a height of 75 feet with approval of a CUP from the finished grade (plus rooftop mechanical equipment). The rooftop mechanical equipment would be screened from view.

Processing/Warehouse Building

The processing/warehouse building would primarily be used for wine processing and bottling, product storage, supply storage, equipment storage, and shipping/receiving with an enclosed truck dock. The building would cover approximately 26,000 sf on the ground level. The ground level would be dedicated to production uses excluding 300 sf to be used for wine order pickup. Above the ground level would be a mezzanine level covering approximately 2,500 sf for administrative uses (i.e., offices, conference room, facilities) and additional storage. At the roof level would be a 2,300-sf rooftop terrace, half of which would be enclosed to create a two-level tasting room open to the public. The remainder of the roof level would be unoccupied and would be allocated to solar power generation.

Public access would not be provided to the interior of the ground floor or mezzanine levels; however, a counter open to the exterior of the building would serve as a transaction point for patrons to pick up wine orders. The three levels would be connected by an exterior stairway, an enclosed or hillside elevator, and separate enclosed emergency stairwell.

The processing/warehouse building would be located at the base of the hillside on which the octagon building would be constructed; and at ultimate buildout, the warehouse building would be linked to the octagon building by pedestrian bridges elevated over the encased canal and roadway connected to a continuous meandering walkway, which would provide a surface connection between the two buildings. A minimum of 19 parking stalls, including required ADA-compliant

parking provisions, would be dedicated to the processing/warehouse building. The parking stalls would be located just west of the building, along either side of the building entrance as well as behind the building adjacent to the loading dock entrance.

Wine Caves

A network of wine caves would be constructed south of the octagon building at a maximum vertical depth of 90 feet below grade and would consist of a fermentation tank room, barrel aging rooms, collection room, two meeting rooms, and two restrooms. The wine caves would cover approximately 32,000 sf. Access would be provided from the octagon building by way of the aforementioned elevator and stairwell. In addition, pedestrian access to the southern end of the wine caves would be provided at grade level through two pedestrian access points. A secondary access would be provided to serve as access for forklifts and utility vehicles. A minimum of 27 parking stalls located adjacent to the octagon building and the processing/warehouse building would be dedicated to serving the wine caves.

Gate House

A gate house is proposed to be developed adjacent to the gates at the main entrance from Callison Road, north of the roundabout. The gate house would consist of a 180-sf building and would house controls for the gates and exterior lighting for the entrance and lower roadway. The gate house would primarily be controlled by a virtual attendant; however, non-virtual occupancy would occasionally occur. One parking stall and a charging station for an electric buggy would be provided at the gate house.

Utility Pad

An approximately 900-sf outdoor, covered utility pad would be built into the hillside, approximately 40 feet south of the Antelope Canal, near the eastern boundary of the project site. The utility pad would be surrounded by walls on all sides and covered by a shade structure. The utility pad would host the main electrical service, a 660 kilovolt-ampere (kVA) minimum diesel or propane generator with required electrical interlock, interlock to on-site solar arrays, telecommunication panel enclosure, propane tank, and a small house panel and controller for site lighting. Access would be provided to the utility pad by the on-site roadway. Three parking stalls would be located adjacent to the utility pad to serve as overflow employee parking.

Project Operations

The principal proposed land use would be the operation of a winery that would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery primarily in the form of small agricultural promotional events. Additional special events would occasionally be held, as further discussed below. It is noted that, consistent with Section 17.56.330(B) of the Winery and Farm Brewery Ordinance, tasting is allowed concurrent with on-site events.

Agricultural Promotional Events and Special Events

Agricultural Promotional Events are proposed as part of project operations in accordance with the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330. In general, these events would consist of professional events and/or gatherings that support the promotion of wine being produced on-site and at other wine-making facilities in Placer County, as well as the promotion of

pairing wine with food prepared with a focus on locally-sourced ingredients. Agricultural Promotional Events could occur any day of the week from 7:00 AM to 10:00 PM.

Pursuant to Section 17.56.330(D)(4)(a), Agricultural Promotional Events are not limited in number. The project applicant has indicated that up to approximately 208 Agricultural Promotional Events could take place on-site annually, which is consistent with assumptions made in the WFBEIR. The Winery and Farm Brewery Ordinance also states that an Agricultural Promotional Event accommodates fifty (50) people or less at one time (excluding staff and tasting room patrons). However, Section 17.56.330(D)(4)(a) states that, for large wineries located on forty (40) acres or greater, additional attendees may be permitted subject to a Conditional Use Permit (CUP). The project applicant is requesting a CUP to increase the maximum attendees at one time for Agricultural Promotional Events from 50 to 75.

Special Events, as defined by the Placer County Winery and Farm Brewery Ordinance, include greater than 50 people at one time, excluding staff and tasting room patrons and not defined as an Agricultural Promotional Event pursuant to Section 17.56.330(D)(4)(a). Pursuant to Table 3 of the Winery and Farm Brewery Ordinance, Special Events are allowed by right, but limited to a maximum of 12 per year. A maximum of 200 people at one time are allowed at Special Events. The proposed project would comply with the requirements included in Table 3 of the Winery and Farm Brewery Ordinance.

Pursuant to Section 17.56.330(B), Special Events could include private parties, fundraisers, social or educational gatherings where outside alcohol may be allowed, and events where the property owner is compensated in exchange for the use of the site and facility (referred to as a facility rental). Weddings are included in the aforementioned general categories of allowable Special Events. Special events do not include industry-wide events, the normal patronage of a tasting room, and private gatherings of the owner where the general public does not attend.

Outdoor Activities

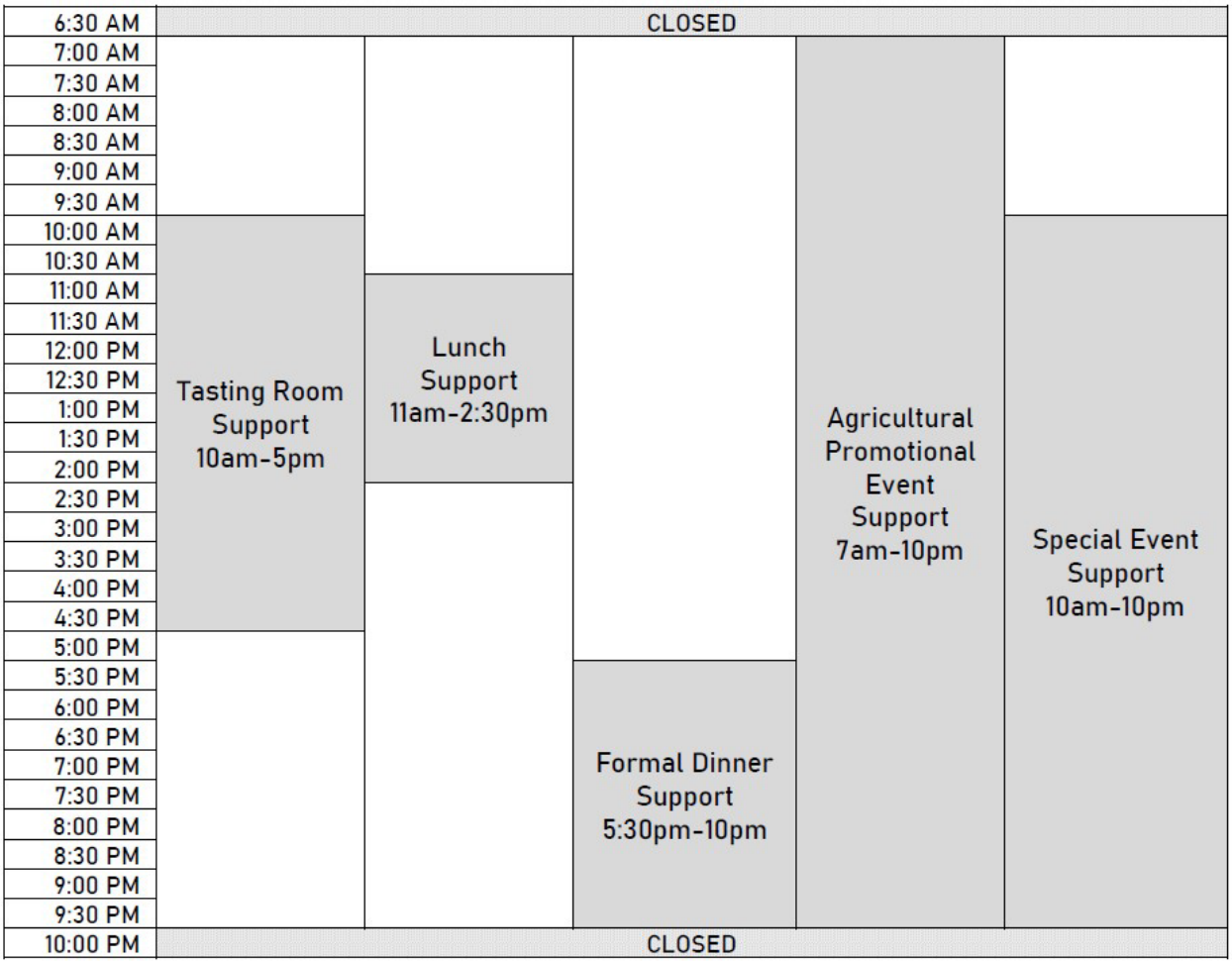
Outdoor activities are proposed to take place on the terrace outside the entry level of the octagon building, as well as on the exterior portion of the roof terrace of the processing/warehouse building during some events and throughout tasting room hours. Amplified music/live speech would occasionally take place at the aforementioned locations during outdoor activities to create ambiance. Proposed amplified music would include, but would not be limited to, live, light music such as a string quartet, chamber group, or pianist played through a small single amplifier, and would comply with Section 9.36, Noise, of the Placer County Code, as required by the Placer County Winery and Farm Brewery Ordinance. Any amplified music exceeding a volume commensurate with creating ambiance would be restricted to indoor locations only. Amplified music could take place from 10:00 AM to 5:00 PM, during events and tasting room hours, and occasionally from 5:00 PM to 8:00 PM for events only. Neither indoor nor outdoor concerts would be included in project operations.

Accessory Use – Restaurant

The proposed project would require approval of a CUP to operate a reservation-only Accessory Use – Restaurant, as defined by and allowed pursuant to the Placer County Winery and Farm Brewery Ordinance. Though subordinate to the primary services offered to guests, and while small as compared to the overall operation, the accessory restaurant is a vital component of the winery's business model. The opportunity to experience the pairing of professionally prepared foods with premiere wines is a long-established expectation in the industry and among wine

afficionados and plays a pivotal role in the success of a high-end winery. The reservation-only accessory restaurant/commercial kitchen could operate daily from 10:00 AM to 5:00 PM for tasting room support; 11:00 AM to 2:30 PM for lunch support; 5:30 PM to 10:00 PM for formal dinner support; 7:00 AM to 10:00 PM for Agricultural Promotional Event support; and 10:00 AM to 10:00 PM for Special Event support (see Figure 3-7). Made-to-order lunch and dinner service would be limited to a maximum of 32 patrons each, seated in the dedicated 725-sf accessory restaurant area.

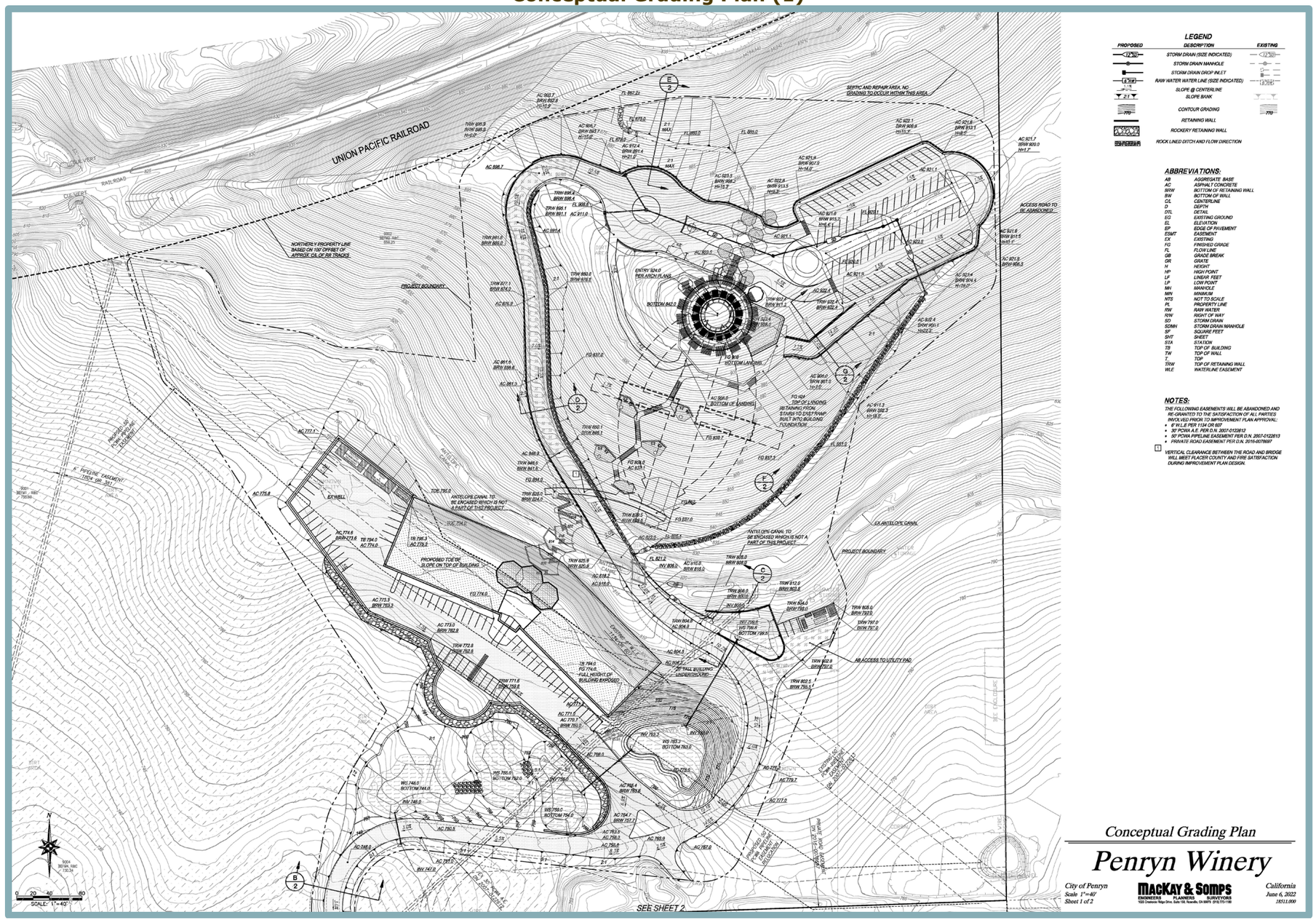
Figure 3-7
Restaurant Operating Schedule



Access and Circulation

Primary vehicular access to the site would be provided directly from Callison Road, approximately 2,400 feet west of the Callison Road/Taylor Road intersection. The proposed project would include improvements to Callison Road along the project frontage to provide a 32-foot-wide paved road section pursuant to County requirements (see Figure 3-8). The portion of Callison Road directly in front of the main entrance to the project site would be raised approximately three feet to achieve the County's required sight distance (see Section H on Figure 3-9).

Figure 3-8
Conceptual Grading Plan (1)



LEGEND

PROPOSED	DESCRIPTION	EXISTING
12"SD	STORM DRAIN (SIZE INDICATED)	12"SD
	STORM DRAIN MANHOLE	
	STORM DRAIN DROP INLET	
6"RW	RAW WATER WATER LINE (SIZE INDICATED)	12"DW
1.5%	SLOPE @ CENTERLINE	
2:1	SLOPE BANK	
770	CONTOUR GRADING	770
	RETAINING WALL	
	ROCKERY RETAINING WALL	
	ROCK LINED DITCH AND FLOW DIRECTION	

ABBREVIATIONS:

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BRW	BOTTOM OF RETAINING WALL
BW	BOTTOM OF WALL
CL	CENTERLINE
D	DEPTH
DTL	DETAIL
EG	EXISTING GROUND
EL	ELEVATION
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FG	FINISHED GRADE
FL	FLOW LINE
GB	GRADE BREAK
GR	GRATE
H	HEIGHT
HP	HIGH POINT
LF	LINEAR FEET
LP	LOW POINT
MH	MANHOLE
MIN	MINIMUM
NTS	NOT TO SCALE
PL	PROPERTY LINE
RW	RAW WATER
ROW	RIGHT OF WAY
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SF	SQUARE FEET
SHT	SHEET
STA	STATION
TB	TOP OF BUILDING
TW	TOP OF WALL
T	TOP
TRW	TOP OF RETAINING WALL
WLE	WATERLINE EASEMENT

NOTES:

THE FOLLOWING EASEMENTS WILL BE ABANDONED AND RE-GRANTED TO THE SATISFACTION OF ALL PARTIES INVOLVED PRIOR TO IMPROVEMENT PLAN APPROVAL:

- 6" W.L.E PER 1134 OR 607
- 30' PCWA A.E PER D.N. 2007-0123812
- 50' PCWA PIPELINE EASEMENT PER D.N. 2007-0122613
- PRIVATE ROAD EASEMENT PER D.N. 2016-0079697

☐ VERTICAL CLEARANCE BETWEEN THE ROAD AND BRIDGE WILL MEET PLACER COUNTY AND FIRE SATISFACTION DURING IMPROVEMENT PLAN DESIGN.

Conceptual Grading Plan

Penryn Winery

City of Penryn | *California*
Scale 1"=40' | *June 6, 2022*
Sheet 1 of 2 | *18511.000*

MacKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1600 Creekside Ridge Drive, Suite 100, Roseville, CA 95678 (916) 773-1100

Figure 3-9
Conceptual Grading Plan (2)



On-site circulation would include a minimum 100-foot diameter roundabout after the main entry off Callison Road. The roundabout would circle a landscaped planter area with a centrally located artistic sculpture before leading to the gate house with a gated entry. The roundabout would provide a turnaround area in front of the gate, and access through the gate would be provided at all times during business hours. The gated entry would lead to a 23-foot-wide paved private driveway with two-foot shoulders on each side. The driveway would provide access to the processing/warehouse building, and then continue to the octagon building where an additional roundabout would be provided to allow a directional change for larger vehicles.

Access to the existing home on the western property boundary would continue to be provided by the existing shared drive off Callison Road, southwest of the project's main entrance, and would remain separate from access to the winery.

Utilities and Public Services

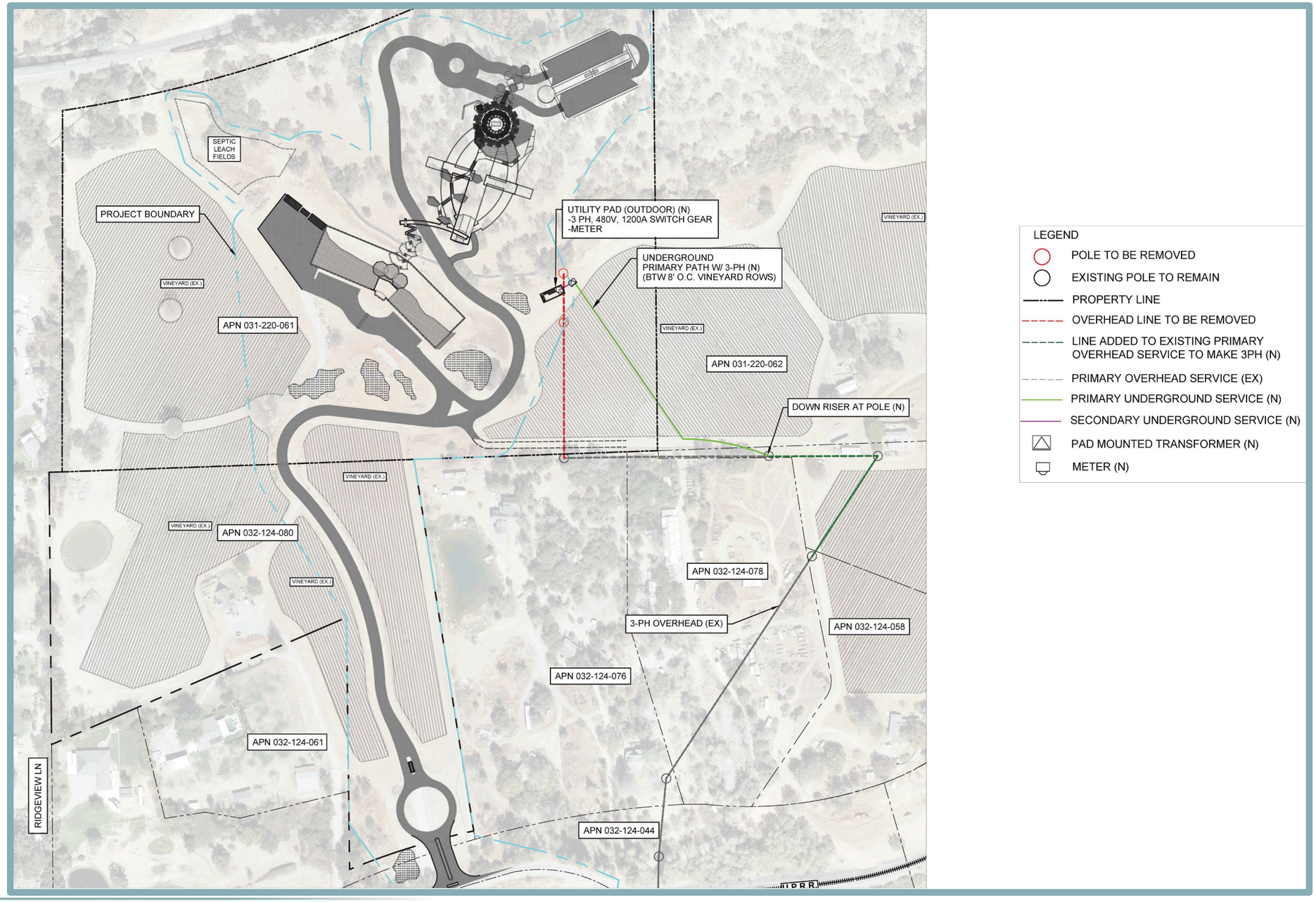
An existing on-site public well, constructed in accordance with State and County requirements, would be used for potable water. Draw down and water quality testing has been completed on the public well and reporting shows compliance with all requirements. Irrigation water is provided on-site from PCWA from the Antelope Canal, which traverses the property. In addition, two existing, non-public wells are located on-site, which produce a total of 90 gallons per minute and could be used to replace the supply from the irrigation canal during periods of canal maintenance when supplies are temporarily interrupted.

Electricity would be provided to the project site by PG&E through a new 1,200-amp, 480-volt, 3-phase main service, which would be backed up by a diesel or propane generator. The generator would be intended for emergency backup only. A portion of the existing overhead power and communication lines that traverse the site would be relocated underground by PG&E in order to reduce fire risk and enhance visual appearance (see Figure 3-10). In addition, an on-site solar generation system would be developed as part of the proposed project. The precise size and design of the on-site solar generation system has yet to be determined; however, the system is proposed to be located at the upper parking lot, as well as on the roof of the processing/warehouse building.

Sanitary sewer service would be provided by an on-site septic system that would be compliant with State and County requirements. Two options are being considered for the septic system, including a single primary leach field ("West" zone) with a dedicated repair area ("East" zone) should the primary system become compromised. The primary leach field would be located below Antelope Canal and at a lower elevation than that of the wine cave floor and the lower warehouse/processing building. The repair area would be located downslope of the top of the property, at an elevation beneath that of the tasting room building. The second option being considered would consist of two smaller systems, each containing primary and leach areas in both the West and East zones. A septic permit would be obtained from the Placer County Environmental Health Division prior to building permit issuance to allow for the development of the on-site septic system.

Completely separate from the sanitary sewer system, the proposed project would include an on-site treatment process for the winery operation process water, which would help conserve natural resources, protect ground/surface water, and overcome land constraints.

Figure 3-10
Electrical Connection Plan



The proposed project would use a High Strength Membrane BioReactor system to remove harmful pathogens and other harmful bacteria from process water to allow for water reuse for vineyard irrigation, landscape areas, water features/fountains, and/or dust control. The High Strength Membrane BioReactor system is Napa Green Certified and could be scaled depending on the time of the year and/or processing needs. The process water treatment system would be located adjacent to the processing/warehouse building in the turnaround area on the westerly side of the project site. The system would be above ground and would be similar in appearance to two, 20-foot cargo containers placed side by side, occupying approximately 400 sf.

Propane would be stored on-site in three, 1,500-gallon tanks, which would be located west of the processing/warehouse building; at the utility pad; and adjacent to the octagon building (see Figure 3-11).

Propane would primarily be used for space conditioning, hot water heating for wine processing, operating the necessary equipment in the commercial kitchen, and powering the emergency backup generator.

Recology Auburn Placer would provide trash and recycling collection services for the proposed project. Trash and recycling would be stored in two locations on-site, adjacent to the processing/warehouse building and on the sub-level of the octagon building

The southern portion of project site would use a single-point drainage outlet for stormwater runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the north side of Callison Road. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The existing undersized pipe conveying flows under Callison Road from south to north will be upsized as part of the road reconstruction and will eliminate overland flow across Callison Road during the 10- and 100- year storm events. The northern portion of the project site would use a detention pond to capture and treat runoff before discharging the runoff into existing open grass-lined channels. A series of ponds would be included and connected to the northerly detention pond for aesthetics purposes, though the ponds would provide additional flood control storage.

Site Work

Approximately 190,000 cubic yards of fill, 165,000 cubic yards of cut, and 25,000 cubic yards of excavation, including the wine caves, would occur, creating a balance on site.

Project Phasing

Construction of the proposed project would occur over an approximate 29-month period. The construction is anticipated to be phased as shown in Figure 3-12. A description of each project phase is as follows:

Phase I

- Callison Road improvements along the project frontage, excluding off-site improvements (i.e., Taylor Road turn lane improvements);
- On- site improvements, including landscaping and decorative walls, from the main entry to approximately Antelope Canal; and
- Building Permits for the following:
    - Gate House;

Figure 3-11
On-site Propane Tank Locations



- Utility Pad; and
- Processing/Warehouse Building.

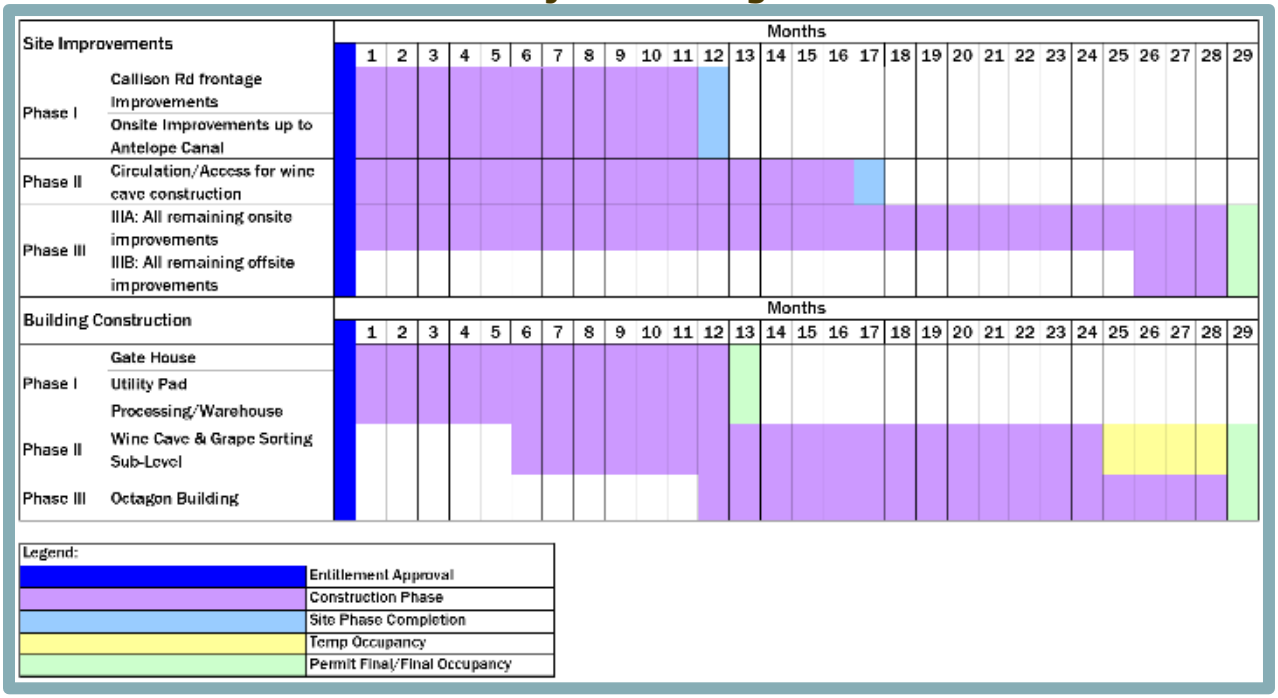
Phase II

- Circulation/Access improvements to construct the wine cave network and main elevator shaft;
- Building Permits for the wine caves and grape processing sub-level;
- Temporary occupancy (not open to the public); and
- Construction of off-site left-turn lane at Taylor Road/Callison Road intersection (as required by Mitigation Measure 16-3).

Phase III

- All remaining on- and off-site improvements;
- Building Permit for the octagon building; and
- Final Occupancy (open to public).

Figure 3-12
Project Phasing



3.6 PROJECT APPROVALS

The proposed project would require County approval of the following:

- Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330; and
- CUP for the operation of a Large Winery on 40+ acres with operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events, and to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

4. Aesthetics

4. AESTHETICS

4.1 INTRODUCTION

The Aesthetics chapter of the EIR describes existing aesthetic resources in the area of the proposed project and the broader region, and evaluates the potential aesthetic impacts of the project. CEQA describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), and the existing visual quality or character of the project area. In addition, pursuant to CEQA Guidelines, this chapter describes potential impacts related to light and glare. The following analysis is based on information drawn from the Placer County General Plan,[1] the Placer County General Plan EIR,[2] the Horseshoe Bar/Penryn Community Plan (HBPCP),[3] the Placer County Design Guidelines,[4] and the Placer County Landscape Design Guidelines.[5]

Pursuant to the court ruling in *Preserve Poway v. City of Poway* (2016) 245 Cal. App.4th 560 [199 Cal.Rptr. 3d 600], community character is separate and apart from aesthetic impacts and, thus, is not a CEQA issue. Rather, the analysis of aesthetics should be limited to tangible, physical evidence that a project is visually inconsistent with the surrounding community (rather than a psychological "feel"). Therefore, where applicable, the analysis presented within this chapter focuses on potential physical changes to visual composition of the project site and surrounding area, rather than overall community character.

4.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of visual resources in the project region and within the vicinity of the project site.

Visual Character of the Region

The regional area encompassing the proposed project is rural in character. The area is situated within the foothills of the Sierra Nevada Mountains in the southwest portion of Placer County, in north-central California. The terrain shifts from rolling grasslands to steep ridges, with ridgelines and drainage patterns throughout the area accentuated by oak woodland and patches of riparian vegetation, contrasting noticeably to the surrounding grasslands. Residential, commercial, public, and industrial development is present throughout the region. In some cases, the rural character historically associated with the ranching and agricultural operations of the County has been replaced by suburban and urban development, with urban growth in the cities of Rocklin, Roseville, Lincoln, and other portions of the County having substantially altered the landscape. Between the developed areas, isolated natural sections have remained, increasing the aesthetic value of the remaining contiguous open space.

1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16,1994 (updated June 28, 2005).
4 Placer County. *Design Guidelines Manual.* Revised September 24, 2003.
5 Placer County. *Placer County Landscape Design Guidelines.* Adopted May 7, 2013.

Areas of uncommon scenic quality have not been identified in the regional surrounding of the proposed project. Additionally, the Placer County General Plan does not identify any roadways in the vicinity of the proposed project as scenic, requiring special considerations for adjacent development, rights-of-way landscaping, or signage restrictions.

State Scenic Highways

The nearest State highway to the project site, located approximately 2,360 feet to the north, is State Route (SR) 193. According to the California Department of Transportation (Caltrans) map of designated and eligible scenic routes under the California Scenic Highway Program, SR 193 is not an officially-designated State scenic highway and designated State scenic highways do not exist within the vicinity of the project site or in Placer County.[6]

Visual Character of the Project Site and Surrounding Area

The following information provides an overview of the physical conditions of the project site and surrounding area in relation to visual character.

Project Site

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County (see Figure 4-1). The proposed project would be located on portions of several parcels consisting of APNs 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The project site, or improvement area, consists of approximately 18 acres of the 44.14-acre parcel area. The southerly portion of the project site, through which the proposed access road would meander, is located within the HBPCP area. The remaining portion of the project site, on which the winery facilities would be located, is outside of the HBPCP area.

Roadways in the immediate project vicinity include Callison Road, which forms the southern boundary of the project site, Ridgeview Lane to the west, and Taylor Road to the east, approximately 0.3-mile from the project site. Interstate 80 (I-80) is located approximately 1.5 miles to the east. Two Union Pacific Railroad (UPRR) tracks pass through the project area, with one track bordering the northern site boundary and the other track bordering the southern site boundary. The spurs are used to move UPRR freight trains and Amtrak passenger trains.

The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. Site elevation ranges from approximately 700 feet to 950 feet. Historically, the project site has been used for agricultural purposes (e.g., cattle grazing).

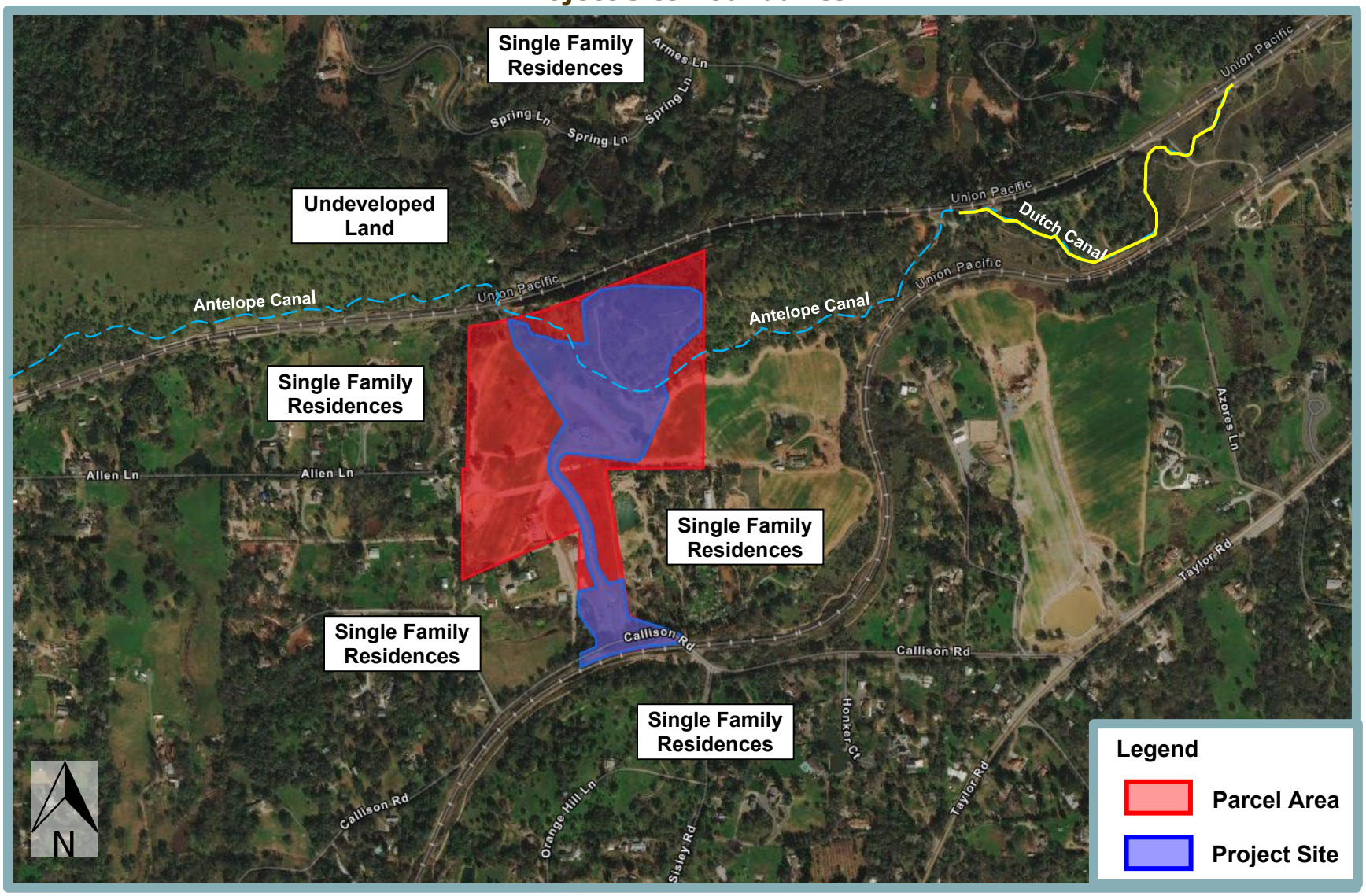
Surrounding Areas

The project site is located within a rural residential area of Placer County. The landscape adjacent to the project site is comprised of ridge tops, punctuated by canyons sloping toward lower and flatter foothill areas. The areas surrounding the project site consist predominantly of rural residential development, agricultural uses, and oak woodlands.

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[6] California Department of Transportation. *California State Scenic Highway System Map*. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed July 2022.

Figure 4-1
Project Site Boundaries



The area north of the project site consists of UPRR tracks, beyond which is rolling hilltops with scattered single-family residential homes and undeveloped land. The areas to the south and east of the project site include rural single-family residences and UPRR tracks. Additional rural single-family residences are located further south, beyond Callison Road and the UPRR tracks. The area to the west of the project site includes rural residences. The nearest existing off-site sensitive receptor is a single-family residence approximately 150 feet to the south of the project site.

Off-Site Improvement Areas

The proposed project would include improvements to Callison Road along the project frontage to provide a 32-foot-wide paved road section consistent with County requirements. The portion of Callison Road directly in front of the main entrance to the project site would be raised approximately three feet to achieve the County's required sight distance. In addition, as required by Mitigation Measure 16-3 of this EIR, a new left-turn lane would be constructed at the intersection of Taylor Road and Callison Road within the County's existing right-of-way, which consists of paved and graveled disturbed surfaces.

Viewer Types

Viewer types in the vicinity that have views of the project site include the following:

- *Motorists* along Callison Road and travelers on the commuter rail line would have existing views of the project site while driving past the site, particularly of the northern hilltop portion of the site. Views of the site from Taylor Road are nearly entirely obscured by existing intervening topography and vegetation.
- *Pedestrians and bicyclists* in the area include nearby residents and visitors that use the public roadways to walk or bike to their destination. Such pedestrians have views of the project site from Callison Road. In general, views experienced by pedestrians and bicyclists are similar to views experienced by motorists. However, because sidewalks are currently not provided along the roadway, the amount of pedestrian traffic along the roadway is relatively limited. Similarly, the roadway does not include dedicated bike lanes.
- *Residents* of the existing rural residences to the north, east, and west of the project site have limited views of the site. In addition, views are partially blocked by existing vegetation associated with the residences and oak woodlands.

Public Versus Private Views

Travelers along nearby roadways, as well as the nearby residences surrounding the project site, would be considered sensitive visual receptors. However, it is important to distinguish between public and private views. Private views are views seen from privately-owned land and are typically viewed by individual viewers, including views from private residences. Public views are views that are experienced by the collective public. In the case of the proposed project, public views would consist primarily of views from Callison Road and the commuter rail line in the project vicinity.

CEQA (Public Resources Code Section 21000 et seq.) case law has established that only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488] the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will

adversely affect the environment of persons in general.'" Such a conclusion is consistent with the thresholds of significance established in Appendix G of the CEQA Guidelines. Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views, rather than private views.

Existing Conditions of Key Viewpoints

Placer County, in coordination with the environmental consultant team for the project, selected key public viewpoints that would most clearly display the proposed project's potential visual effects. Segments of Callison Road and the commuter rail lines within the project vicinity are characterized as key public viewpoints (see Figure 4-2).

Existing Views from Callison Road/Main Entry

The view from Callison Road/Main Entry toward the project site is shown in Figure 4-3. As shown in View 1, the view from Callison Road toward the proposed main entry of the project site consists of trees, grasses, and a metal vehicle access gate in the foreground, as well as a private gravel road, which is located on the property and proceeds from the foreground into the background. Grasses are prominent in the midground, and newly planted vineyards and canopies of trees can be seen in the background.

Existing Views from Callison Road/Ridgeview Lane

The view from Callison Road/Ridgeview Lane toward the project site is shown in Figure 4-4. As shown in View 2, the view from Callison Road/Ridgeview Lane toward the project site currently consists of low-level wire property line fencing, parallel to Callison Road, in the foreground. Ruderal grasses, trees, and a pond are located in the foreground beyond the fencing. The midground is comprised of recently graded areas, trees, and scattered existing residences. Canopies of blue oak woodlands on the hillside can be seen in the background. Views of the existing residences west of the project site are partially screened by trees and vegetation, while others are fully visible from Callison Road.

Existing Views from the Commuter Rail Line

Views from the commuter rail line toward the project site are shown in Figure 4-5. As shown in View 3, the foreground is comprised of scattered trees and the midground is comprised of vineyards. The hillside canopy of blue oak woodlands, where the proposed octagon building would be located, dominates the background. It is noted that another commuter rail line runs along the project site's northern boundary, but views of the project site from this location are obstructed by intervening topography and vegetation, as confirmed during the project team's site visit. Thus, this view was excluded from the aesthetics analysis.

Light Pollution and Glare

Light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and excessive illumination at an intensity that is inappropriate. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species.

Figure 4-2
Proposed Project - Key to Photo Simulations

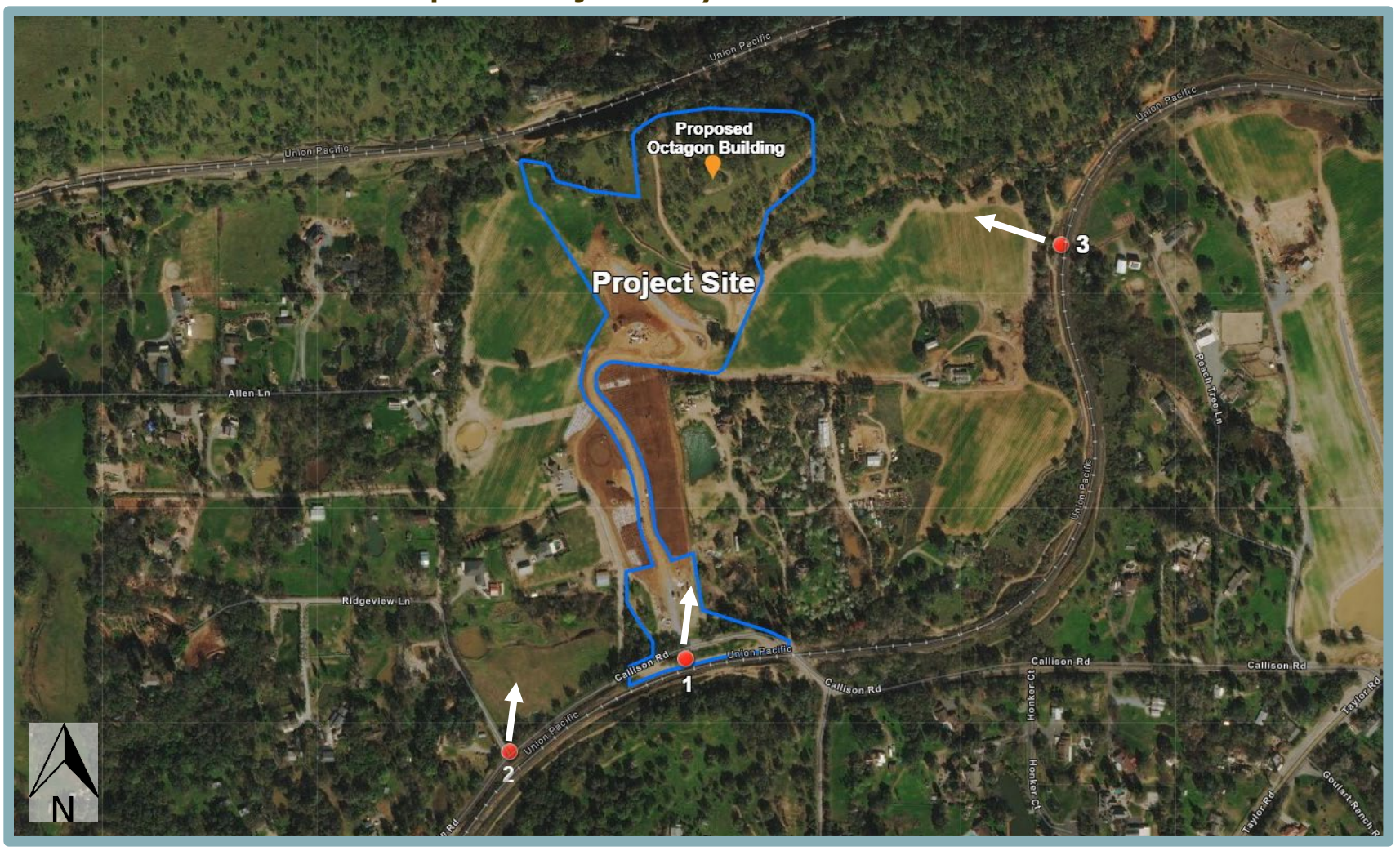


Figure 4-3
View 1: Project Site from Callison Road/Main Entry Looking Northeast

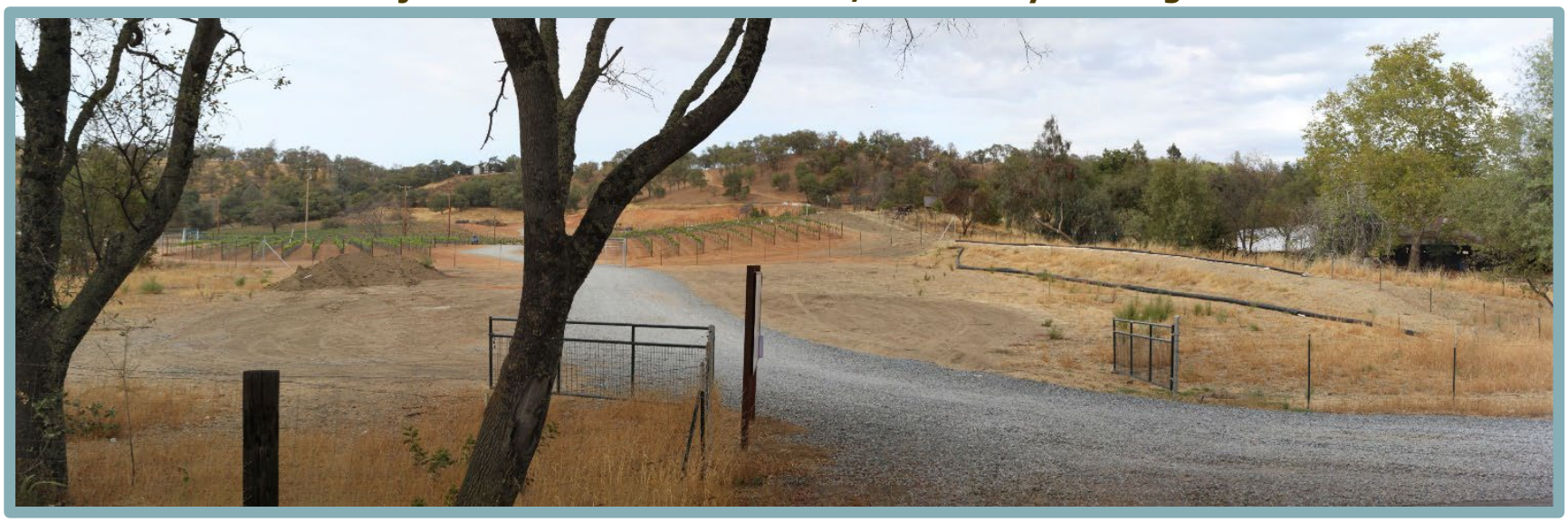


Figure 4-4
View 2: Project Site from Callison Road/Ridgeview Lane Looking Northeast



Figure 4-5
View 3: Project Site from Commuter Rail Looking Northwest



Currently, the project site is characterized by an undeveloped, unlit landscape. The project site is located within the vicinity of existing sources of light and glare associated with the nearby residences on the parcel area and to the east, west, and south. Lighting associated with existing development and headlights from vehicles traveling on adjacent roadways, currently contributes to the overall nighttime lighting environment of the project area.

4.3 REGULATORY CONTEXT

Applicable federal laws or regulations pertaining to the aesthetic quality of the project area do not exist. However, the existing State and local laws and regulations applicable to the proposed project are listed below.

State Regulations

The following is an applicable State regulation related to aesthetic resources.

California Scenic Highway Program

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. Such highways are identified in Section 263 et seq. of the California Streets and Highways Code.

Local Regulations

The following local regulations are applicable to the proposed project.

Placer County General Plan

The following design goals and policies of the Placer County General Plan are applicable to the proposed project.

Goal 1.K To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

Policy 1.K.1 The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:

a. Avoid locating structures along ridgelines and steep slopes;
b. Incorporate design and screening measures to minimize the visibility of structures and graded areas; and
c. Maintain the character and visual quality of the area.

Policy 1.K.2 The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.

Policy 1.K.3 The County shall require that new development in rural areas incorporates landscaping that provides a transition between the

vegetation in developed areas and adjacent open space or undeveloped areas.

Policy 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;
d. Replant graded areas to ensure establishment of plant cover before the next rainy season;
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development; and
f. Provide and maintain site-specific construction Best Management Practices (BMPs).

Policy 1.K.5 The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to conform to the natural terrain.

Policy 1.K.6 The County shall require that new development on hillsides employ design, construction, and maintenance techniques that:

a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns;
b. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas;
c. Minimize risk to life and property from slope failure, landslides, and flooding; and
d. Maintain the character and visual quality of the hillside.

Goal 1.O To promote and enhance the quality and aesthetics of development in Placer County.

Policy 1.O.1 Except as otherwise provided in the Design Guidelines of an approved Specific Plan, the County shall require all new development to be designed in compliance with applicable provisions of the Placer County Design Guidelines Manual.

Policy 1.O.3 The County shall require that all new development be designed to be compatible with the scale and character of the area. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that:

a. They do not silhouette against the sky above ridgelines or hilltops;
b. Rooflines and vertical architectural features blend with and do not detract from the natural background or ridge outline;
c. They fit the natural terrain; and
d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).

Policy 1.O.4 The County shall require that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.

Policy 1.O.5 The County shall require that new development at entrances to rural communities be designed to include elements such as signage, landscaping, and appropriate architectural detailing to help establish distinct identities for such communities.

Policy 1.O.8 The County shall, where appropriate, require new development to provide activity pockets along public sidewalks as pedestrian amenities, including such features as benches, sitting ledges, and mini-parks.

Policy 1.O.9 The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.

Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.

Policy 6.D.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

Policy 6.D.12 The County shall support the retention of heavily vegetated corridors along circulation corridors to preserve their rural character.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Community Design Element related to aesthetics are applicable to the proposed project.

Goal 1 Protect and preserve the unique character of the community. Maintain the identity of the Plan area as a scenic, tranquil, rural-residential community compatible with the area's physical constraints and natural features.

Goal 3 Preserve, enhance, and protect the scenic resources visible from scenic routes in the plan area, such as I-80, Auburn-Folsom Road, and other major roadways (i.e., King, Horseshoe Bar, Newcastle, English Colony, Taylor Roads) to preserve existing vistas of the Sacramento Valley, Loomis basin foothills, and the Sierra

Nevada Mountain range, as well as other local views which are important to maintaining the community's rural identity.

Policy 1 Whenever possible, natural features should be retained as buffers between different, potentially incompatible uses as well as serving to preserve the rural character of the area. Where natural features are not available, landscaped buffers should be provided to minimize the adverse effects of high intensity uses.

Policy 3 Roads should follow natural topography wherever possible to minimize cutting and grading.

Policy 4 Encourage creative and innovative building techniques to construct buildings suited to natural hillside surroundings.

Policy 5 Wherever possible, native trees should be preserved and the use of native and/or drought tolerant plant materials encouraged in all revegetation/landscaping projects.

Policy 7 Encourage and utilize existing programs for protection and enhancement of scenic corridors, including but not limited to, design review, sign control, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts.

Policy 8 Landscaping shall be used to reduce the visual impact of all structures, including solid fences. Natural vegetation should dominate where possible. Where existing vegetation is inadequate, the use of native plant materials is encouraged. Landscaping materials should provide an informal character and smooth transition between buildings, parking lots adjoining roadways and open areas.

Policy 10 An important consideration in the design of any land development project should be the conservation of natural drainage channels and swales, and the preservation of existing natural resources. Where development is proposed adjacent to the area's major stream corridors, encourage a design which locates streets and common open space, not backyards, or other private areas adjacent to the riparian areas to enhance the creekside environment, and to permit access to this important resource. Incorporate the use of "Best Management Practices" into the project's design to mitigate the impact of urban runoff on the stream corridors.

Policy 12 Projects within the Plan area should comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, or the Rural Design Guidelines.

Policy 13 Night lighting, visible from the exterior of a building and the project's boundaries shall be limited to that necessary for security, safety,

and identification. All night lighting shall be low intensity and screened from view of passing traffic and adjacent residential areas. Lighting shall not be directed in an upward manner nor beyond the boundaries of the parcel on which the structure is located.

Policy 15 To the maximum extent possible, all structures, including residences, should complement and blend in with the natural setting of the planning area, and to this end the following principles shall be incorporated into the project design:

a. The visual impact of the structure shall be mitigated either through reduction of building bulk, increased setbacks, or introduced hillside structures shall be designed to step down the natural hillside in order to achieve a low building profile and minimize grading.
b. Structures may be located within existing tree covered areas and still be consistent with slope, geologic and related conditions and the need to preserve natural terrain and locally unique or especially beautiful wooded areas.
c. Largely bare slopes and sparsely wooded ridges visible from large portions of the planning area should be kept free of structures to the maximum extent possible.
d. If development does take place on highly visible barren slopes or ridges, it must be unobtrusive and designed to maintain the character of the natural setting.

Policy 16 The use of natural materials (i.e., wood siding and field stone) is encouraged. Exterior color shall blend with the surrounding natural landscape. The use of earth tones II or natural finishes which blend with the surrounding background is encouraged.

Policy 17 Large, bulky and unscreened structures are discouraged particularly if they are visible from adjoining roadways.

Placer County Landscape Design Guidelines

The Placer County Landscape Design Guidelines were adopted by the Placer County Board of Supervisors on May 7, 2013. The overall purpose of the Placer County Landscape Design Guidelines is to provide County staff, prospective developers, and stakeholders with a basic framework for designing landscaped areas within unincorporated Placer County and to ensure continuity, consistency, and quality design. In addition, the Guidelines are used to assist the Planning Services Division with their review of submitted plans for landscape improvements by providing consistent and specific design criteria intended to help determine if a proposal is acceptable. The Guidelines focus on landscaping requirements for streetscape and parking lots.

Placer County Design Guidelines Manual

The Placer County Design Guidelines Manual includes guidelines and standards that aim to remove as much design discretion as possible at the staff level in order for prospective developers to assess their chances of approval based on consistency with the manual. The overall goal of

the Placer County Design Guidelines Manual is to promote visual environments in the communities of western Placer County that are of high aesthetic quality, offer variety in developing community design images reflective of community heritage, and, in some cases, maintain an overall rural continuity while, in others, identify an appropriate urban design theme.

4.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to aesthetics. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an aesthetics impact is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (see Chapter 19, Effects Not Found to be Significant);
- In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As noted above, issues related to whether the proposed project would result in the following impact are discussed in Chapter 19, Effects Not Found to be Significant, of this EIR:

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (see Chapter 19, Effects Not Found to be Significant).

Method of Analysis

The section below gives full consideration to the development of the proposed project and acknowledges physical changes to the existing setting. Impacts to the existing environment of the project area are to be determined by the contrast between the visual setting before and after buildout of the proposed project. The standards of significance listed above are used to delineate the significance of any visual alterations of the site, including alterations that would impact views from public viewsheds in the project area. The standards are not based solely on a change in the visual character or quality of the site and its surroundings, but whether the changes would substantially degrade said visual character or quality.

In October 2021, Placer County Planning Division staff, Raney Planning & Management (Raney) Vice President Nick Pappani, and 19six Architects staff conducted a site visit to determine key viewpoints for analysis within the EIR. 19six Architects, under contract with Raney, prepared computer-generated simulations of the selected three viewpoints to aid in the visual character evaluation of the proposed project. With respect to View 3, 19six Architects and Raney reviewed speculative sheets for Amtrak's passenger cars to determine the height at which a seated

passenger would be viewing their surroundings. The photograph was taken of the representative height using a ladder adjacent to the tracks.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4-1 Have a substantial adverse effect on a scenic vista. Based on the analysis below, the impact is *less than significant*.

A scenic vista, as defined in this EIR, is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. A scenic vista includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within Placer County for viewing and sightseeing. Similarly, Placer County, according to the Placer County General Plan, has determined that the planning area of the General Plan does not contain officially designated scenic highways, corridors, vistas, or viewing areas. The HBPCP identifies Auburn-Folsom Road, I-80, and Sierra College Boulevard as scenic corridor areas; however, the project site is not near any of the identified scenic corridors.

Based on the above information, because established scenic vistas are not located on or adjacent to the project site, the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4-2 In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. Based on the analysis below, even with implementation of mitigation, the impact is *significant and unavoidable*.

Given that the existing development in the immediate vicinity of the site is primarily rural in nature, the analysis within this chapter considers the project area to be non-urbanized. The proposed project would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave system, an accessory restaurant, and other associated facilities, on approximately 17.96 acres of the 44.14-acre parcel area.

A 29,250-square-foot (sf) octagon building would be constructed, which would consist of a sub-level, as well as four above-ground levels reaching a height of 75 feet from the finished grade (plus rooftop mechanical equipment that would be screened from view) (see Figure 3-5 in the Project Description chapter). The proposed building would sit atop

the hill located in the northern portion of the project site in order to allow for gravity filtration down to the wine cave level, as well as to provide views overlooking the existing vineyards below and Sacramento Valley beyond. The exterior of the building would include a living façade comprised of an exoskeletal structure covered with plant life to blend in with the surrounding environment. Currently, the maximum allowable building height for both of the project site's zoning districts (Farm combining Building site 20-Acre Minimum [F-B-X 20] and Residential Agricultural combining Building site 100,000-square-foot Minimum [RA-B-100]) is 36 feet. Therefore, the proposed octagon building would exceed the allowable height limit by 39 feet. As a result, the project includes a Zoning Text Amendment (ZTA) request to add language to Section 17.56.330 of the Placer County Winery and Farm Brewery Ordinance to allow a structure for a winery, tasting room, or accessory use-restaurant to exceed the prescribed height limit for the applicable zone if the additional height is authorized through a conditional use permit (CUP) process that includes an analysis of visual impacts including photo simulations. The project includes a Conditional Use Permit request that would allow the winery to have an above-ground height of 75-feet from finished grade.

A processing/warehouse building would be used for bottling, product storage, supply storage, equipment storage, and shipping/receiving with an enclosed truck dock. The building would cover 23,500 sf on the ground level, 1,000 sf on a mezzanine level, and would include a 2,300-sf rooftop overlook (see Figure 3-5 in the Project Description chapter). Approximately one third of the roof would be a "green roof", consisting of a layer of vegetation planted over a waterproofing system. The remaining two thirds would be allocated to solar power generation. The processing/warehouse building would be located at the base of the hillside on which the octagon building would be constructed; and the warehouse building would be linked to the octagon building by a continuous meandering walkway, which would provide a surface connection between the two buildings.

A gate house is proposed to be developed adjacent to the gates at the main entrance from Callison Road, north of the roundabout (see Figure 3-4 in the Project Description chapter). The gate house would consist of a 180-sf building and would house controls for the gates and exterior lighting for the entrance and lower roadway. One parking stall and a charging station for an electric vehicle would be provided at the gate house.

The proposed project would be landscaped with both existing and proposed native trees, shrubs, and groundcover. As detailed under Impact 7-3 in the Biological Resources chapter of this EIR, a total of 4.2 acres of blue oak woodland and 2.1 acres of annual brome grassland are anticipated to be directly impacted by the proposed project. However, the project would include new trees and other landscaping elements throughout the project site and enhanced landscaping at the project entry. Per the project's proposed landscaping plans, the project would include the planting of 84 new trees, including 11 new trees at the main entry, 36 trees at the tasting room terrace, and 37 new trees at the entrance to the octagon building and parking lot. New shrubs and groundcover plantings would also be included throughout the project site. Additionally, the proposed project would retain 6.7 acres of on-site blue oak woodland. As such, the proposed landscaping and preservation of oak woodland would help to screen the project from public views.

As discussed above, public views of the project site are afforded from Callison Road and the southerly commuter rail line. Changes to the aforementioned public views due to development of the proposed project are discussed separately in further detail below.

Views from Callison Road/Main Entry

Currently, the view from this public vantage point along Callison Road at the proposed main entry to the project site consists of ruderal grasslands, graded areas, and scattered trees in the foreground, as well as a private on-site gravel road, which winds from the foreground into the background. The midground is dominated by recently planted vineyards and graded areas, and the background consists of upward sloping topography, including the hilltop on which the octagon building would be located. The hilltop and adjacent slopes are marked by oak woodland habitat.

Photo simulations prepared by 19six Architects include daytime and nighttime public views of the project site from this viewpoint with a rendering of the proposed project. The simulations of the viewpoint from the proposed main entry at Callison Road include a new paved road, roundabout, centrally located landscaped planter and artistic sculpture, and associated landscaping in the foreground; the gate house and main entry gate would be located in the midground; and the processing/warehouse building and the octagon building would be located on the hillside in the background.

Figure 4-6 shows the daytime existing viewshed from Callison Road/Proposed Main Entry as compared to the view from Callison Road/Proposed Main Entry with the proposed project incorporated. In addition, Figure 4-7 shows the nighttime view from Callison Road/Proposed Main Entry with the proposed project incorporated. As shown in Figure 4-6 and Figure 4-7, the proposed roundabout, which would circle a landscaped planter area and artistic sculpture, would be visible from Callison Road. Views of the main entrance and associated gate house are partially obscured by the central artistic sculpture.

The character and quality of the existing view would be altered following incorporation of the proposed project. For example, the trees, grasses, and graded areas currently located in the foreground would be replaced by the proposed main entrance area, and the gravel road in the midground would be paved to provide primary site access. The existing background would be significantly altered, primarily through construction of the octagon building on the hilltop; however, the view of the existing forested ridgeline west of the project site would remain intact. In addition, the Callison Road frontage would be improved with naturalistic planting, and the rock outcroppings and oak trees located east of the existing private gravel road would be retained. While the main entrance area would be fully visible from Callison Road, the processing/warehouse building would be less discernable due to entry features (e.g., archway, wall, etc.) and vegetative screening. The octagon building would be partially screened from view by existing oak woodlands. Although construction of the octagon building would require the removal of 33 blue oak trees, the existing canopy of blue oak woodland on the hillside would remain largely unaffected and would continue to be visible from Callison Road. Furthermore, as shown in the photo simulations, the proposed structures are designed to be consistent with the Placer County Design Guidelines and would use natural and earth tone colors to blend in with the surrounding vegetation.

Figure 4-6
View 1: Existing Versus Post-Project Conditions (Daytime)



Figure 4-7
View 1: Post-Project Conditions (Nighttime)



The proposed entry gate and main road are located within the southern portion of the project site, which is within the HBPCP area. Policy 1 and Policy 3 of the HBPCP require the use of buffers to preserve the rural character of the area, either through the use of natural features or landscaped buffers. Per the HBPCP, landscaping should be used to reduce the visual impact of structures and natural vegetation should dominate wherever possible. The project would also be required to comply with General Plan Policy 1.O.3(d), which requires new development structures outside of village, urban, and commercial center, to be designed and located such that the structures use building materials, colors, and textures that blend in with the natural landscape.

As previously discussed, the proposed structures would be partially screened by vegetation and would be designed with naturalistic colors. While the entry gate would be visible from Callison Road and would significantly change the current visual composition of the project site, the project would utilize landscaping to reduce the overall visual impact of the proposed entrance area. Thus, the proposed design of the project would comply with Policy 1 and Policy 3 of the HBPCP, as well as Policy 1.O.3(d) of the General Plan. Furthermore, motorists on Callison Road are anticipated to be the primary viewer types, and the speed limit on Callison Road is 25 miles per hour (mph) along the project frontage. Given the speed limit, public views would be temporary, occurring only as motorists briefly pass by the site. Accordingly, such views are not highly sensitive to changes in the visual character or quality of the project site.

General Plan Policy 1.O.3(a) requires new development structures outside of village, urban, and commercial centers to be designed and located such that they do not silhouette against the sky above ridgelines or hilltops. As discussed above, the current maximum allowable building height for the project site is 36 feet. The proposed octagon building would be constructed at a height of 75 feet from the finished grade, which would exceed the current allowable building height by 39 feet. As shown in Figure 4-6 and Figure 4-7, the new 75-foot-tall octagon building would extend above the existing tree canopy on the hillside and would silhouette against the sky. Thus, the project would be inconsistent with General Plan Policy 1.O.3(a). The project would not, however, conflict with Policy 1.K.1 in that the octagon building would be located atop a knoll rather than a ridgeline.

Based on the above, the public view of the project site and its surroundings from Callison Road/Proposed Main Entry would be considered to be substantially degraded by the proposed project.

Views from Callison Road/Ridgeview Lane

Similar to the discussion above, the current view of the project site from Callison Road/Ridgeview Lane consists of low-level wire property line fencing, ruderal grass, and graded areas, trees, and a pond in the foreground; ruderal grasses, trees, and existing rural residences in the midground; and blue oak woodland canopy on the hillside in the background, where the octagon building would be located. Views of existing residences west of the project site are partially screened by trees and other vegetation.

Photo simulations prepared by 19six Architects include a daytime rendering of the proposed project from this public viewpoint. The simulation from the Callison Road/Ridgeview Lane viewpoint assumed a vineyard in the midground and the octagon building on the hilltop in the background, while the remaining landscape would be retained.

Figure 4-8 shows the existing viewshed from Callison Road/Ridgeview Lane as compared to the view with the proposed project incorporated.

As shown in Figure 4-8, the proposed octagon building is discernible from Callison Road/Ridgeview Lane, just past the canopy of oak woodland. However, the character and quality of the background view primarily remains that of a forested hillside environment, with rural residences and agricultural uses in the midground and foreground. The visual intrusion of the octagon building into the skyline is minimal based on the distance of the building from the roadway. While the octagon building projects above the hilltop and canopy line, the building is sufficiently screened by vegetation and oak woodlands, which allows the skyline above the site area to remain substantially intact. Furthermore, the addition of a vineyard in the midground is consistent with the surrounding rural residences and agricultural uses.

Based on the above, the public view of the project site from Callison Road/Ridgeview Lane would not be considered to be substantially degraded by the proposed project.

Views from the Commuter Rail Line

As shown in Figure 4-9, the current view from the public vantage point along the southerly commuter rail line is comprised of trees and dirt vineyard access roads in the foreground and vineyards in the midground. The background is dominated by blue oak woodlands located on the hillside within the northeast corner of the project site, where the octagon building would be located.

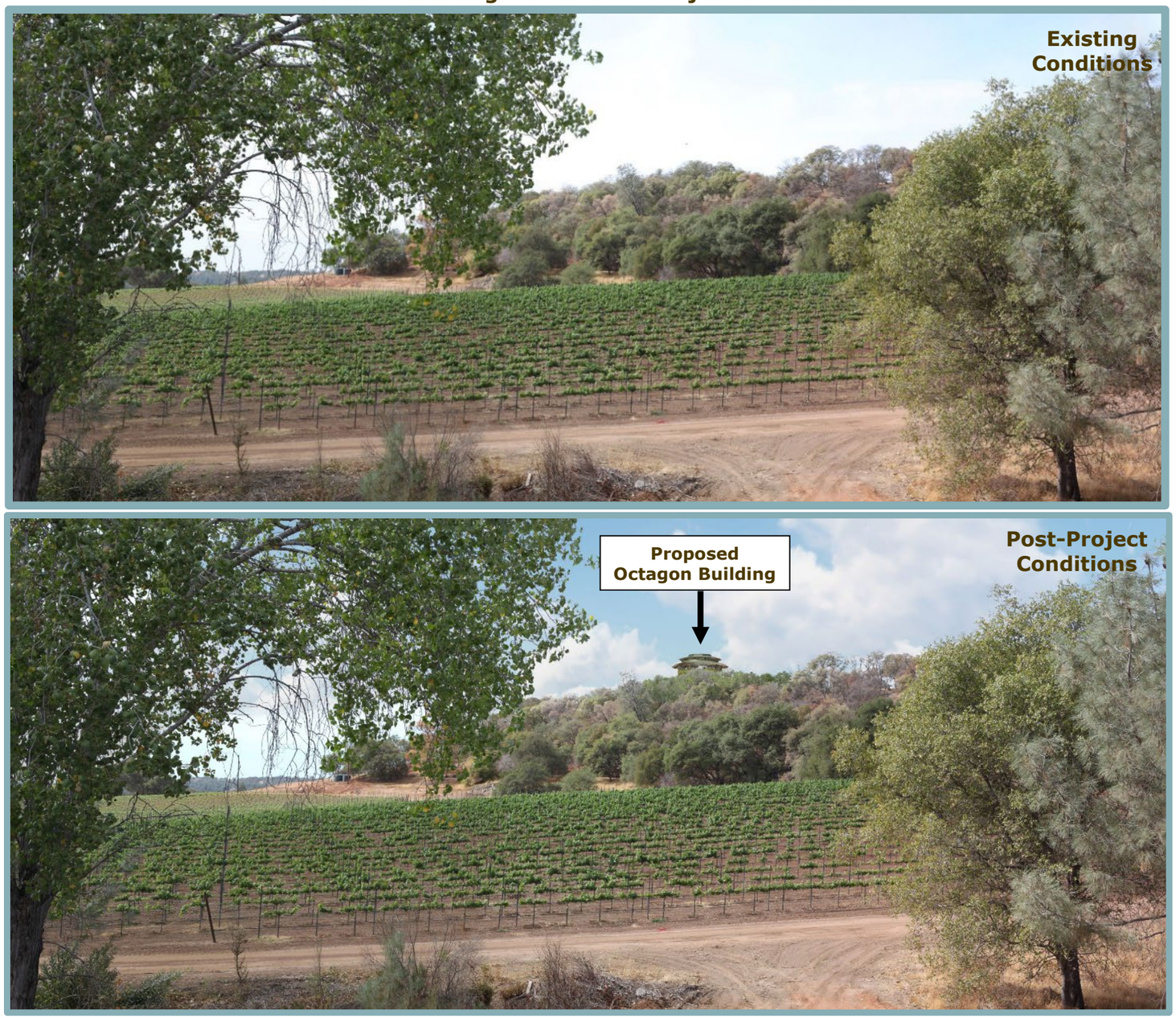
Photo simulations prepared by 19six Architects include a daytime rendering of the proposed project from this public viewpoint. The simulation from the commuter rail line includes the proposed octagon building on the hilltop, while the existing vineyard and oak woodland landscapes in the foreground and midground remain unaltered. Figure 4-9 shows the view from the commuter rail line as the viewshed currently exists, as compared to the view with the proposed project incorporated. As shown in Figure 4-9, the proposed octagon building would be discernible on the hilltop from the commuter rail line, above the canopy of oak woodlands. However, the character and quality of the background view substantially remains that of a forested hillside environment, with trees in the foreground and vineyards in the midground.

Following project construction, the views of the existing trees, vineyard, and blue oak woodlands would be substantially retained. However, the octagon building on the hilltop would be a noticeable addition on an otherwise primarily undeveloped landscape. The visual intrusion of the octagon building from the commuter line would be more substantial than that of the view from Callison Road/Ridgeview Lane as the octagon building would project above the hilltop and canopy line when viewed from the commuter rail line. Furthermore, the project would be inconsistent with General Plan Policy 1.O.3(a) because the octagon building would extend above the existing tree canopy and would silhouette against the sky. The project would not, however, conflict with Policy 1.K.1 in that the octagon building would be located atop a knoll rather than a ridgeline.

Figure 4-8
View 2: Existing Versus Post-Project Conditions



Figure 4-9
View 3: Existing Versus Post-Project Conditions



Based on the above, the existing visual character and quality of public views of the project site from the commuter rail line would be considered to be substantially degraded by the proposed project.

Conclusion

As mentioned above, the project site is undeveloped and consists primarily of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The proposed project would result in changes in the public views from Callison Road/Ridgeview Lane, the southerly commuter rail line, and the Callison Road/Main Entry viewpoint. Substantial degradation would occur to the public views of Callison Road/Main Entry and the commuter rail line, due primarily to the proposed octagon building, which would extend above the existing tree canopy on the hillside and silhouette against the sky.

Therefore, the proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings, and a ***significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would help to further screen public views of the project site, but would not sufficiently reduce the impact to a less-than-significant level, as development of the proposed project would still substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, even with implementation of the following mitigation measure, the impact would remain *significant and unavoidable*.

4-2 *In conjunction with submittal of improvement plans or building permit plan, the project applicant shall submit a Final Landscape Plan. The Final Landscape Plan shall include, but not necessarily be limited to, the following:*

- *Additional plantings along the project's Callison Road frontage, while maintaining sight distance requirements at the project driveways. The plantings shall include a mix of trees and shrubs, the species and size of which shall be determined by the Placer County Community Development Resource Agency;*
- *A living façade on floors 2-4 of the octagon building that includes plants that are native, or native-appearing and drought-tolerant;*
- *Structural materials and colors on the upper portion of the octagon building shall be representative of the surrounding oak woodland vegetation; and*
- *Retention of existing oak woodlands on the slope in front of the octagon building for screening purposes. If any of this screening vegetation is damaged during construction, replacement landscaping including native, or native-appearing and drought-tolerant vegetation; shall be planted to the satisfaction of the Placer County Community Development Resource Agency.*

The Final Landscape Plan shall be subject to review and approval by Placer County Community Development Resource Agency.

4-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted previously, the project site is primarily characterized by an undeveloped, unlit landscape. Thus, development of the project site with a winery and associated structures and improvements would introduce additional sources of light and/or glare to a site where minimal sources currently exist. The standard color temperature for all public interior and exterior lighting for the proposed development would be 2700 Kelvin warm white, the same as an incandescent Edison lamp, which would emit a golden porch light glow. Lighting fixtures throughout the site would be shielded to avoid causing light spill on adjacent properties. As shown in Figure 4-6 and Figure 4-7, the proposed main entrance area and structures would be conservatively lit during the daytime and nighttime and would adhere to Section 17.54.070(A)(2)(i) of the Placer County Code and be subject to compliance with the applicable sections of the Placer County Design Guidelines related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass property lines. The proposed interior and exterior lighting is discussed in further detail below.

Interior Lighting

The proposed octagon building is designed with dark interior finishes and fully shielded interior lighting fixtures, which would be aimed inward to avoid light spill. The downlights in the restaurant ceiling would be fully shielded and would not be visible from outside the octagon building. Low cove lighting would also be installed along the floorboards and the ceiling. The restaurant would be dimly lit to resemble a candle lit atmosphere and the core walls would have back lit bottle displays. Spaces within the octagon building requiring brighter lighting, such as kitchens and prep stations, would be located deep within the octagon building and therefore, light would not spill outside. Kitchens and prep stations located near openings to the outside would have perforated or slotted shutters on the windows to limit light spill.

Exterior Lighting

All exterior lighting fixtures would be fully shielded. As required by the International Dark-Sky Association (IDA), aiming angles of the fixtures would be limited to contain light that might escape sideways or up, which would prevent light trespass and glare visible from the night sky. Exterior lighting would follow County Rural Design Guidelines to blend in. The main entry gate and the proposed structures would introduce new sources of night lighting in the form of exterior light sources such as architectural accent lighting, motion-activated security lighting, landscape lighting, and interior lighting visible through windows. However, as shown in Figure 4-7, the night lighting would be concentrated on the main entry gate area and would not cast light on adjacent properties or Callison Road.

The octagon building would not be lit from outside. Rather, strategic small openings in the facade would allow some light to escape, but would not substantially illuminate the landscape. Such lighting would be strategically located to define the building at night and foliage growing on the building would stand in contrast in front of window openings.

Exterior lighting of the octagon building would be low output to avoid any impact beyond the area that needs to be lit and would minimize blue light emissions per IDA requirements. This exterior lighting would comply with ECC Title 24, IDA regulations and Rural Design Guidelines for Placer County while meeting National Fire Protection Association (NFPA) 101 Life and Safety minimum egress illumination levels. Exterior lighting would be limited to occupied building hours when daylight is not sufficient to light the area and lights would be turned off after hours in compliance with Energy Code Compliance Title 24 and the IDA requirements.

Parking/support spaces and the pathways connecting the buildings would be lit with low, fully shielded path lights. The pathways would be hidden when viewed from below and above, and light levels would be limited to minimal code requirements for egress and to avoid stumbling hazards in compliance with NFPA 101, IDA and County Rural Design Guidelines. Lighting in the parking lots would be fully shielded with low pole heights and poles would be located to avoid light spill on adjacent properties. Sign lighting would be fully shielded and would face downward to limit illumination onto the sign only. All other exterior lights would be as concealed as possible in accordance with IDA and Placer County Rural Design Guidelines.

Because the types of lighting and the specific locations have not yet been determined, the proposed project could increase the amount of light and glare generated on-site, which could be visible from the surrounding residential development and roadways in the project vicinity, including contributions to nighttime sky glow that deteriorate the “dark sky” setting of the project site and surround environs. Therefore, the proposed project could be considered to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4-3 *Prior to Improvement Plan approval, the project applicant shall submit a lighting plan for the project to Placer County Planning Services for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:*

- *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*
- *Place and shield or screen area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas;*
- *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and*
- *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate*

signage to prevent light and glare from adversely affecting adjacent properties.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

Two types of aesthetic impacts may be additive in nature and thus cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed.

Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed project's incremental contribution to night sky lighting and changes in visual character are addressed below.

The cumulative setting for impacts related to aesthetics encompasses buildout of the HBPCP area and the under-construction or planned Bickford Ranch Specific Plan (BRSP) area. For more details regarding the cumulative setting, refer to Chapter 20, Statutorily Required Sections, of this EIR.

4-4 Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the HBPCP and BRSP areas. Based on the analysis below, even with implementation of mitigation, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

The geographic setting for analysis of long-term cumulative changes in visual character associated with the proposed project is the area covered by the HBPCP and BRSP, as development within the HBPCP and BRSP have the potential to affect many of the same views analyzed for the proposed project. Specific existing views of the project site from

Callison Road and the commuter rail line are identified in Figure 4-3, Figure 4-4, and Figure 4-5, above.

Future development within the HBPCP and BRSP areas would result in changes to the existing land use environment through conversion of currently vacant land to developed uses that would result in changes in visual character. The southern portion of the project site is located within the approximately 16,620-acre HBPCP area, which encompasses the majority of the surrounding area to the south and west of the project site. The HBPCP area is predominantly rural; however, the HBPCP has anticipated buildout of approximately 5,028 residential units, 26 acres of industrial uses, 38 acres of commercial uses, and 494 acres of open space. In addition, the approximately 1,928-acre BRSP area is located northwest of the project site. The BRSP area is also rural with nearby ranchettes and the anticipated buildout of the BRSP includes 1,890 residential units, 1,130.8 acres of open space, parks, and recreation center, and 27.9 acres of public facilities. Development of planned land uses within the HBPCP and BRSP areas, as well as the project site, would change the existing visual character of those specific locations from vacant or minimally developed land to more intensively developed residential, commercial, and industrial areas, or in the case of the proposed project, a winery.

Development projects within the HBPCP and BRSP areas would be required to comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, the specific design guidelines contained in the respective community or specific plan, and all applicable sections of the Placer County Code. The Placer County Design Guidelines Manual provides instruction on the design direction to be implemented with the construction of new buildings, which includes setbacks, extensive use of wood, earth tone colors, and significant amounts of landscaping. Such standards serve to reduce impacts on visual character and help to maintain general consistency with the project surroundings. The proposed project would use natural and earth tone colors consistent with the Placer County Design Guidelines and HBPCP Policy 16.

Cumulative buildout in the geographic area would result in a substantial change in visual character of the project region and, thus, a significant cumulative impact would occur. As discussed under Impact 4-2, given that the project site is predominantly undeveloped and affords views from Callison Road and the commuter rail line of rural landscape, comprised of rolling topography containing some grassland areas and blue oak woodlands, the existing visual character of the project site would be significantly altered with implementation of the proposed project. Therefore, the project's incremental contribution to the significant cumulative impact would be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above significant impact, but not to a less-than-significant level. While the mitigation measure would help to further screen public views of the project site, development of the proposed project would still alter the existing visual character of the project site. Therefore, even with implementation of the following mitigation measure, the impact would remain *cumulatively considerable* and *significant and unavoidable*.

4-4 Implement Mitigation Measure 4-2.

4-5 Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the HBPCP and BRSP areas. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development throughout the unincorporated Placer County area, particularly conversion of rural or currently vacant sites to urban uses, would increase the sources of light and glare, which would have the potential to contribute to sky glow in the area and result in a significant cumulative impact.

However, cumulative development within the County, including the proposed project, would be subject to existing regulations and guidelines related to light and glare. For example, Section 17.54.070(i) of the Placer County Code requires that lighting in new development is consistent with the lighting standards contained within the Placer County Design Guidelines Manual. As described in Impact 4-3 above, the proposed project in particular would be required to submit a lighting plan for the project to the Placer County Planning Services Division for review and approval prior to Improvement Plan approval (see Mitigation Measure 4-3). Mitigation Measure 4-3 requires the project's lighting to be Dark-Sky compliant as specified by the IDA.

Based upon the above analysis, cumulative development within Placer County would be subject to Section 17.54.070(i) of the Placer County Code requiring that new development within the County comply with lighting standards, and prior to project implementation, a lighting plan would be submitted showing that each respective proposed project would avoid contribution to sky glow through Dark-Sky design compliance. However, without compliance with Mitigation Measure 4-3, which requires submittal and implementation of a lighting plan, the proposed project, in combination with cumulative development of the HBPCP and BRSP areas could result in a significant cumulative impact related to light and glare and the impact could be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less than cumulatively considerable* level.

4-5 Implement Mitigation Measure 4-3.

5. Agriculture and Forestry Resources

5. AGRICULTURE AND FORESTRY RESOURCES

5.1 INTRODUCTION

The Agriculture and Forestry Resources chapter of the EIR describes the status of the existing agriculture and forestry resources within the boundaries of the project site, using current State data, including identification of any Prime Farmland, Unique Farmland or Farmland of Statewide Importance. In addition, potential conflicts with existing zoning for agricultural use or right-to-farm ordinances applicable to the proposed project are identified, as well as Williamson Act contracts. The chapter also focuses on the forestry resources present on-site and addresses the proposed project's potential to result in the loss of forest land or conversion of forest land to non-forest use. Documents referenced to prepare this chapter include the Placer County General Plan,[1] the Placer County General Plan EIR,[2] the Horseshoe Bar/Penryn Community Plan (HBPCP),[3] the Placer Legacy Open Space and Agricultural Conservation Program Implementation Report,[4] the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey,[5] and the California Important Farmland Finder.[6]

5.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section describes current farmland and soil productivity classification systems, as well as the extent and quality of the agriculture and forestry resources present on the project site.

Farmland Classifications

The Farmland Mapping and Monitoring Program (FMMP), part of the Division of Land Resource Protection, California Department of Conservation (DOC), uses soil agricultural productivity information from the NRCS to create maps illustrating the types of farmland in a particular area.

The FMMP was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the USDA. The intent of the USDA was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland maps are derived from the USDA soil survey maps using the LIM criteria.

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
4 Placer County. *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report.* June 2000.
5 U.S. Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. Available at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 2022.
6 California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 2022.

Since 1980, the State of California has assisted the USDA with completing the mapping in the State. The FMMP was created within the California DOC to carry on the mapping activity on a continuing basis, and with a greater level of detail. The California DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California use the Land Capability Classification and Storie Index Rating systems, but also consider physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth.

The California DOC classifies lands into seven agriculture-related categories: Prime Farmland, Farmland of Statewide Importance (Statewide Farmland), Unique Farmland, Farmland of Local Importance (Local Farmland), Grazing Land, Urban and Built-up Land (Urban Land), and Other Land. The first three types listed above are collectively designated by the State as Agricultural Land for the purposes of CEQA (see Public Resources Code [PRC] Section 21060.1). Important Farmland maps for California are compiled using the modified LIM criteria and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into surrounding classifications.

Each of the seven farmland types are summarized below, based on California DOC's A Guide to the Farmland Mapping and Monitoring Program.[7]

Prime Farmland

Prime Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to two years) prior to the mapping date.

Farmland of Statewide Importance

Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.

Unique Farmland

Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. The land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date.

Farmland of Local Importance

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee. Placer County farmland of local importance includes lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would meet the Prime or Statewide designation and have been improved for irrigation, but are

[7] California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. *A Guide to the Farmland Mapping and Monitoring Program*. 2004.

now idle; and lands that currently support confined livestock, poultry operations, and aquaculture.

Grazing Land
Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for the Grazing Land category is 40 acres.

Urban Land
Urban and Built-up Land is occupied with structures with a building density of at least one unit to one-half acre. Uses may include but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land
Other Land is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

Project Site Farmland Classifications
According to the FMMP, the project site is mapped entirely as Other Land (see Figure 5-1).[8]

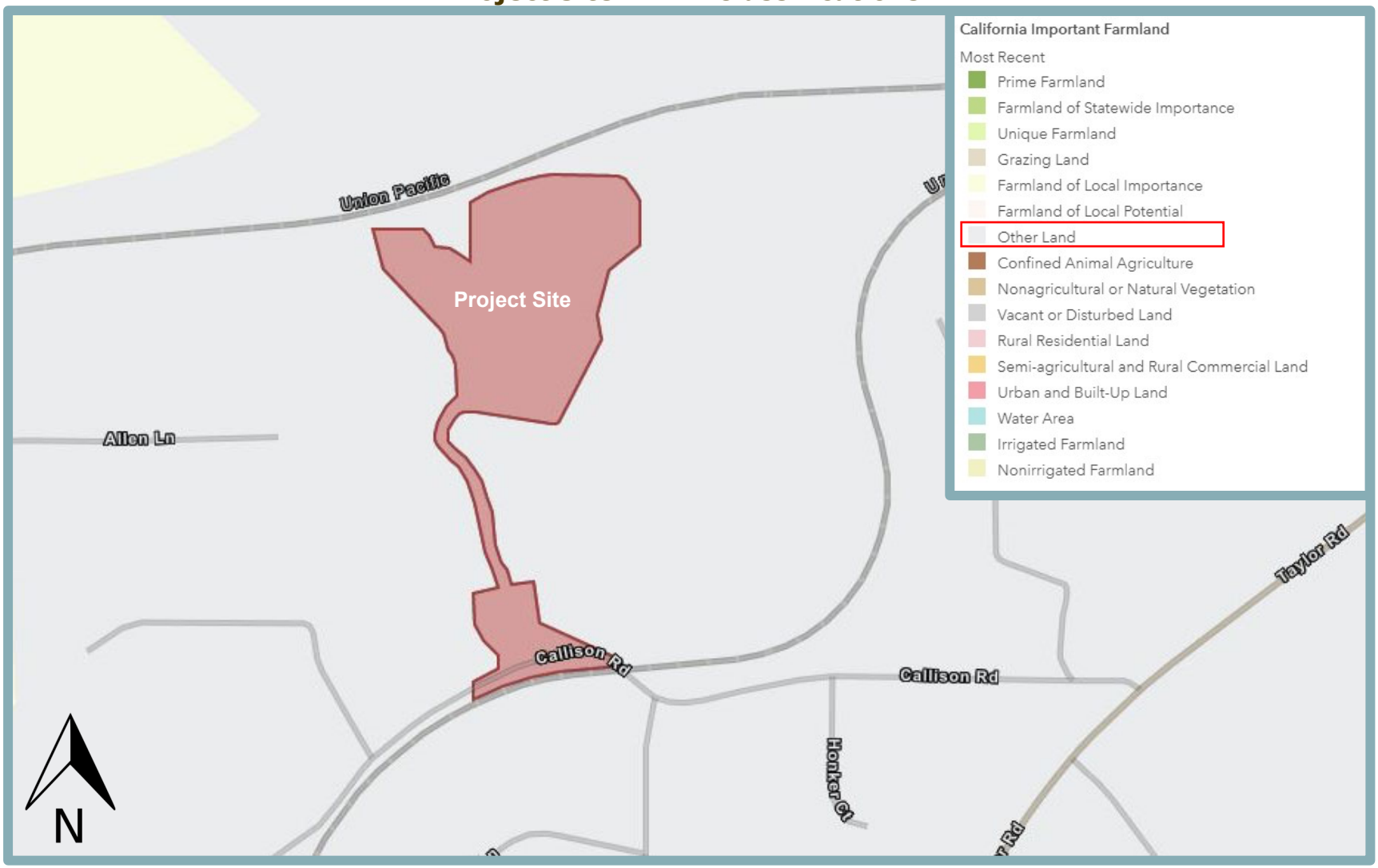
Agricultural Productivity of Soils
The USDA NRCS uses two systems to determine a soil's agricultural productivity: the Land Capability Classification System and the Storie Index Rating System. The "prime" soil classification of both systems indicates the presence of few to no soil limitations, which, if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production.

The Land Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in Table 5-1.

The Storie Index Rating system ranks soil characteristics according to suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than 10 rating), which are not suitable for agriculture. Under the Storie Index Rating system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. Unlike the Land Capability Classification outlined above, the Storie Index Rating System does not distinguish between irrigated and non-irrigated soils.

[8] California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 2022.

Figure 5-1
Project Site FMMP Classifications



Note: Site boundaries are approximate.
Source: California Department of Conservation, Farmland Mapping and Monitoring Program, 2022.

Table 5-1
Land Capability Classification

Class	Definition
I	Soils have slight limitations that restrict their use.
II	Soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
III	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
IV	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
V	Soils are not likely to erode but have other limitations; impractical to remove that limit their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply or to aesthetic purposes.

Source: U.S. Department of Agriculture, Natural Resources Conservation Service. Available at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/nra/?cid=nrcs143_014040. Accessed March 2022.

The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table 5-2.

Table 5-2
Storie Index Rating System

Grade	Index Rating	Definition
1 – Excellent	81 through 100	Few limitations that restrict their use for crops
2 – Good	61 through 80	Suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs
3 – Fair	41 through 60	Suited to a few crops, or special crops, and require special management
4 – Poor	21 through 40	If used for crops, severely limited and require special management
5 – Very Poor	11 through 20	Not suited for cultivated crops, but can be used for pasture/range
6 – Non-Agriculture	Less than 10	Soil and land types generally not suited to farming

Source: USDA, Web Soil Survey, 2022.

Table 5-3 below summarizes the existing on-site soil types along with the Land Capability Classification and Storie Index Rating for each soil type. The locations of the soil types are shown in Figure 5-2. As shown in Table 5-3, according to the Web Soil Survey, soils within the project site have a Land Capability Classification of Classes IV and VII. Class IV soils are defined as having very severe limitations that reduce the choice of plants or that require very careful management, or both, and Class VII soils are defined as having very severe limitation that make them unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.[9] The Storie Index Ratings of the on-site soils are either Grade 3 – Fair, or Grade 4 – Poor.

[9] U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed July 2021.

Figure 5-2
Project Site Soil Types

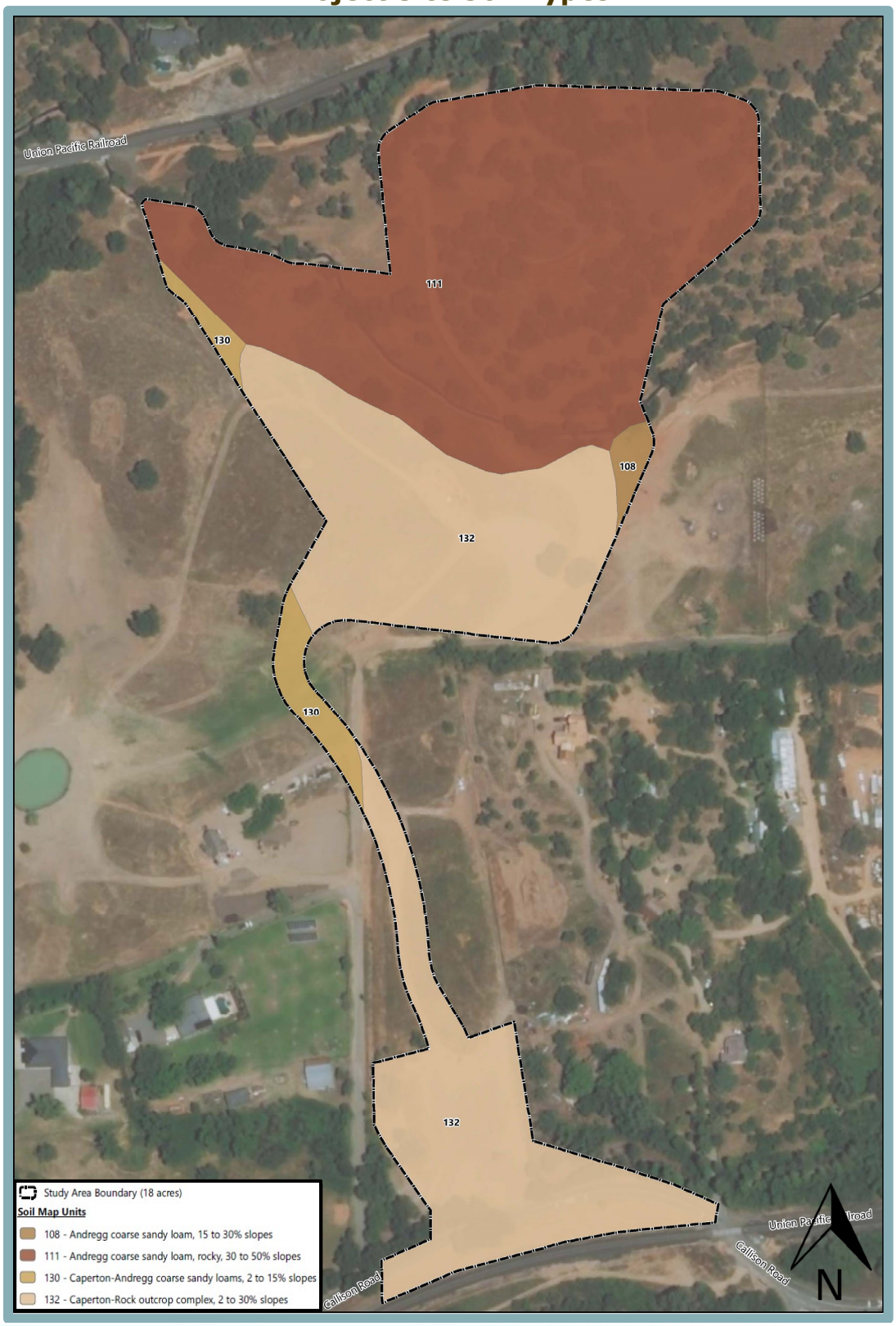


Table 5-3
Agricultural Ratings of On-Site Soils

Soil Type	Land Capability Classification	Storie Index Grade
Andregg coarse sandy loam, rocky, 15 to 30 percent slopes	VI	Grade 3 – Fair
Andregg coarse sandy loam, rocky, 30 to 50 percent slopes	VII	Grade 4 – Poor
Caperton-Andregg coarse sandy loams, 2 to 15 percent slopes	IV	Grade 4 – Poor (Caperton) Grade 3 – Fair (Andregg)
Caperton-Rock outcrop complex, 2 to 30 percent slopes	VII	Grade 4 – Poor (Caperton) N/A (Rock outcrop)

Source: U.S. Department of Agriculture, Web Soil Survey, 2022.

Grade 3 soils are only fairly well-suited to a few crops, or special crops, and require special management, while Grade 4 soils are severely limited for crop use and require special management.[10]

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, has been the State's premier agricultural land protection program since the Act's enactment. The Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses. The vehicle for the agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return restricted parcels are assessed for property tax purposes at a rate consistent with their annual use, rather than potential market value.

With respect to potential conflicts with a Williamson Act contract, of the three parcels that comprise the parcel area, the northernmost parcel (APN 031-220-061) was recently under an active Williamson Act contract known as Agricultural Preserve 148 (see Figure 5-3). While a Notice of Non-Renewal was previously filed with the County to terminate the Williamson Act contract, a request was filed subsequent to the Notice of Non-Renewal to rescind the termination of Agricultural Preserve 148 and to instead divide the contract into two new Williamson Act contracts, each with minimum 10-year terms (PLN21-00578), as shown in Figure 5-4.[11]

As discussed further in the Regulatory Context section of this chapter, for the purposes of compliance with the Williamson Act, "prime agricultural land" is defined as land that meets any of the five criteria listed in Placer County Code Section 17.64.020. On June 14, 2022, the Board of Supervisors adopted Resolution No. 2022-122, which rescinded Agricultural Preserve 148 and simultaneously established Agricultural Preserves PLN21-00578 ("Preserve A") and PLN22-00200 ("Preserve B"), as shown in Figure 5-4.

[10] U.S. Department of Agriculture, Soil Conservation Service. *Soil Survey of Placer County, California, Western Part* [pg. 76]. 1980.

[11] Placer County Community Development Resource Agency Planning Division. *PLN21-00578 – Request to divide Agricultural Preserve 148 in order to create a new preserve and contract*. March 11, 2022.

Figure 5-3
Agricultural Preserve 148

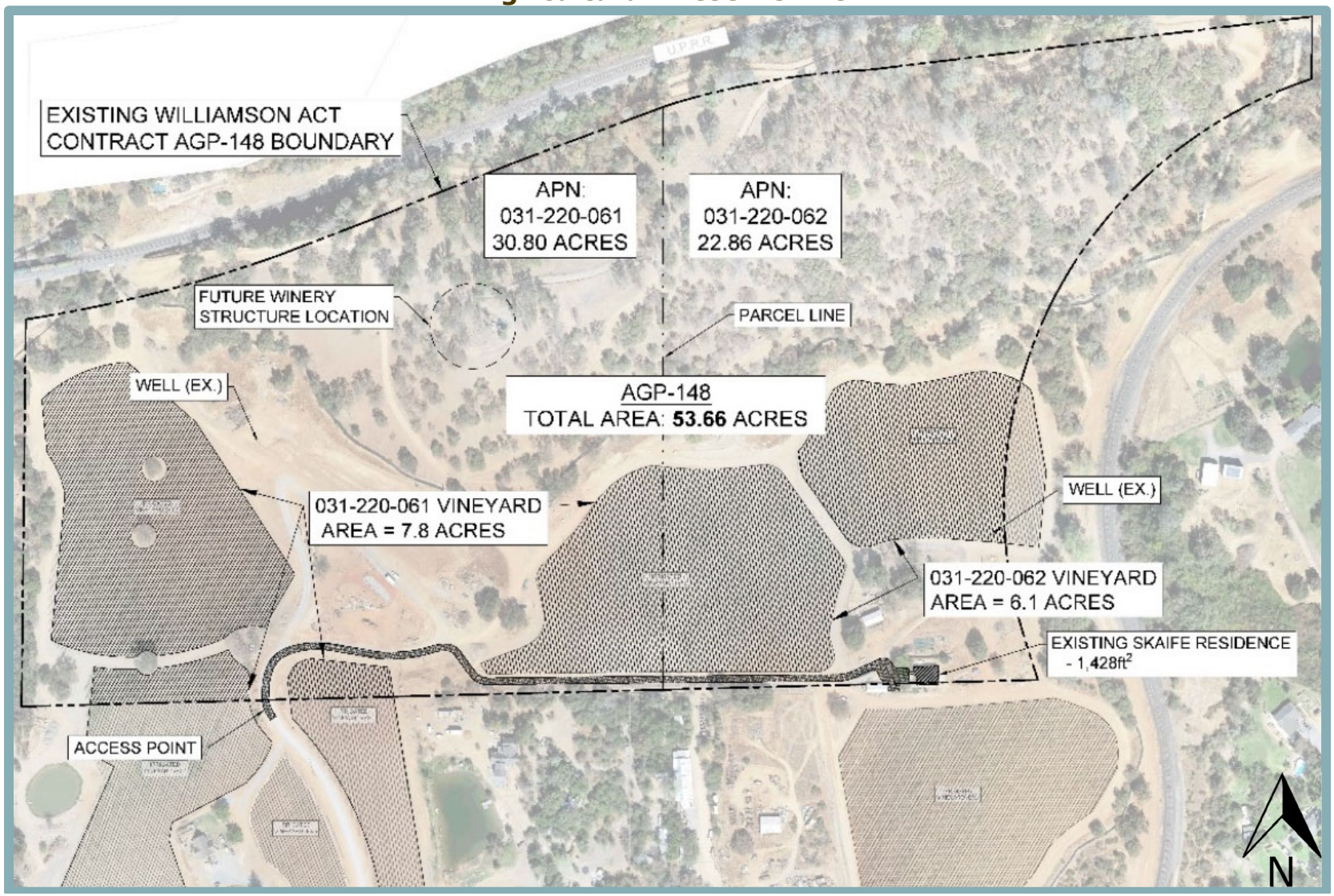
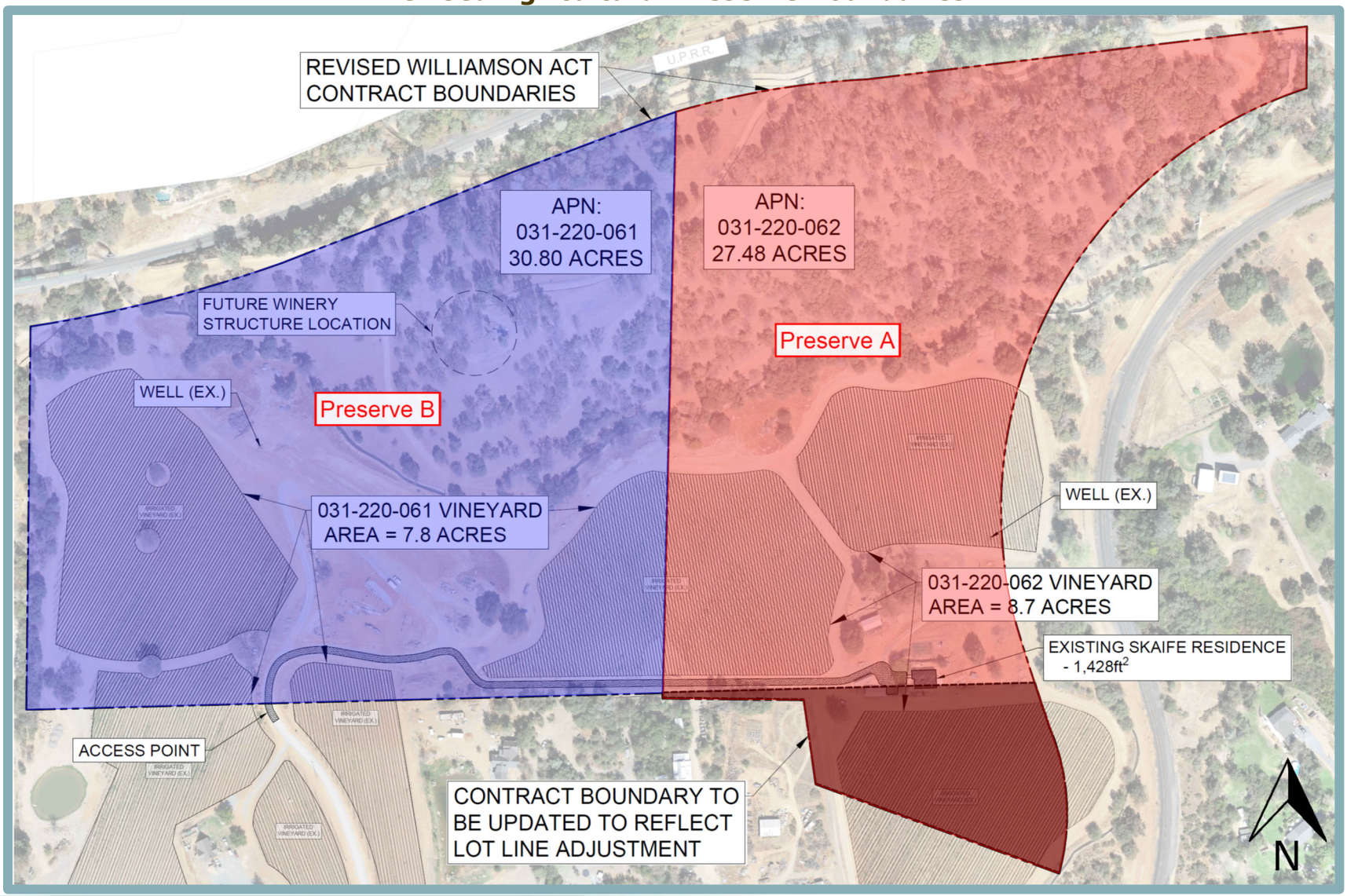


Figure 5-4
Revised Agricultural Preserve Boundaries



PLN22-00200 governs APN 031-220-061, a portion of which contains the approximately 17.96-acre project site (see Figure 3-2 of the Project Description and Figure 5-3 below). Pursuant to Resolution No. 2022-122, PLN21-00578 and PLN22-00200 meet the County Code's definition of "prime agricultural land," as the "land is planted with fruit or nut-bearing trees, vines, brushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200.00) per acre." The vines on PLN22-00200, which meet the definition of "prime agricultural land" in Section 51201 of the Williamson Act, are outside of the project site boundaries.

Existing Agricultural Operations

The project site is not currently used for the purposes of growing crops. Rather, the 17.96-acre project site includes agricultural-related uses (i.e., dirt roadways and graded surfaces) that provide access to recently planted wine grapes located within the 44.14-acre parcel area, but outside of the project site. The portions of the project site within the two southern parcels (APNs 032-124-080 and 032-124-044) contain the dirt roadways and graded surfaces. The portion of the site in the northern parcel (APN 031-220-061) consists of oak woodland and grassland habitats. A small herd of cattle grazes within the oak woodland.

Existing Forestry Resources

Pursuant to PRC Section 12220(g), "forest land" is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

In addition, as defined by PRC Section 4526, "timberland" is "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees." Commercial species are determined by the State Board of Forestry and Fire Protection.

Finally, according to Government Code Section 51104(g), a "Timberland production zone" is defined as "an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in [Government Code Section 51104] subdivision (h)."

As discussed further in Chapter 7, Biological Resources, of this EIR, the project site contains 6.5 acres of oak woodlands, 4.4 acres of which would be removed or impacted by the proposed project. Thus, the project site could be considered to meet the 10 percent native tree cover criterion for "forest land," as established by PRC Section 12220(g).

It should be noted that the site is not zoned for forest land or timberland uses. The site is currently zoned Farm combining Building site 20-Acre Minimum (F-B-X 20) (APN 031-220-061) and Residential combining Agricultural combining Building site 100,000-square-foot Minimum (RA-B-100) (APNs 032-124-080 and 032-124-044). Pursuant to Placer County Code Section 17.10.010, the purpose of the F zone is to provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. In addition, Placer County

Code Section 17.44.010 establishes that the purpose of the RA zoning district is to stabilize and protect the rural residential characteristics of the area to which the zone is applied and to promote and encourage a suitable environment for family life, including agricultural uses. The F and RA zoning districts are distinct from the County's Forestry (FOR) and Timberland Production (TPZ) zones, which are detailed in Sections 17.12.010 and 17.16.010 of the Placer County Code.

5.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to agriculture and forestry resources are not applicable for this analysis. The existing State and local laws and regulations pertaining to such resources are listed below, as applicable.

State Regulations

The following are applicable State regulations related to agriculture and forestry resources.

Williamson Act

The California Land Conservation Act, better known as the Williamson Act, has been the State's premier agricultural land protection program since the act's enactment in 1965. The California Legislature passed the Williamson Act in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act creates an arrangement whereby private landowners enter into contractual agreements with counties and cities to voluntarily restrict land to agricultural and open space uses. The vehicle for such agreements is a rolling-term, 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

Local Regulations

The following are the local regulations and standards relevant to agriculture and forestry resources.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to agriculture and forestry resources are applicable to the proposed project.

Agricultural Land Use

Goal 1.H To designate adequate agricultural land and promote development of agricultural uses to support the continued viability of Placer County's agricultural economy.

Policy 1.H.1 The County shall maintain agriculturally-designated areas for agricultural uses and direct urban uses to designated urban growth areas and/or cities.

Policy 1.H.2 The County shall seek to ensure that new development and public works projects do not encourage expansion of urban uses into designated agricultural areas.

Policy 1.H.4 The County shall allow the conversion of existing agricultural land to urban uses only within community plan areas and within city spheres of influence where designated for urban development on the General Plan Land Use Diagram.

Policy 1.H.5 The County shall require development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses.

Policy 1.H.6 The County shall require new non-agricultural development immediately adjacent to agricultural lands to be designed to provide a buffer in the form of a setback of sufficient distance to avoid land use conflicts between the agricultural uses and the nonagricultural uses, except as it may be determined to be unnecessary or inappropriate within a Specific Plan as part of the Specific Plan approval. Such setback or buffer areas shall be established by recorded easement or other instrument, subject to the approval of County Counsel. A method and mechanism (e.g., a homeowners association or easement dedication to a non-profit organization or public entity) for guaranteeing the maintenance of this land in a safe and orderly manner shall be also established at the time of development approval.

Goal 7.A To provide for the long-term conservation and use of agriculturally-designated lands.

Policy 7.A.1 The County shall protect agriculturally-designated areas from conversion to non-agricultural uses.

Policy 7.A.3 The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.

Policy 7.A.7 The County shall maintain agricultural lands in large parcel sizes to retain viable farming units.

Policy 7.A.8 The County shall encourage infill development in urban areas as an alternative to expanding urban boundaries into agricultural area.

Policy 7.A.10 The County shall facilitate agricultural production by allowing agricultural service uses (i.e., commercial and industrial uses) to locate in agriculturally-designated areas if they relate to the primary agricultural activity in the area. The County shall use the following guidelines to analyze the suitability of a proposed agricultural service use:

a. The use will not adversely affect agricultural production in the area;
b. The use supports local agricultural production;
c. It is compatible with existing agricultural activities and residential uses in the area;
d. The use will not require the extension of sewer or water lines; and
e. It will not result in a concentration of commercial or industrial uses in the immediate area.

Policy 7.A.11 The County shall support appropriate efforts by public and private conservation organizations to use conservation easements as a tool for agricultural preservation.

Policy 7.A.12 The County shall actively encourage enrollments of agricultural lands in its Williamson Act program, including the use of Farmland Security Zones.

Land Use Conflicts

Goal 7.B To minimize existing and future conflicts between agricultural and non-agricultural uses in agriculturally-designated areas.

Policy 7.B.1 The County shall identify and maintain clear boundaries between urban/suburban and agricultural areas and require land use buffers between such uses where feasible. These buffers shall occur on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.

Policy 7.B.3 The County shall consider fencing subdivided lands adjoining agricultural uses as a potential mitigation measure to reduce conflicts between residential and agricultural uses. Factors to be considered in implementing such a measure include:

a. The type of agricultural operation (i.e., livestock, orchard, timber, row crops);
b. The size of the lots to be created;
c. The presence or lack of fences in the area;
d. Existing natural barriers that prevent trespass; and
e. Passage of wildlife.

Policy 7.B.4 The County shall continue to enforce the provisions of its Right-to-Farm Ordinance and of the existing state nuisance law.

Economic Viability of Agriculture

Goal 7.C To protect and enhance the economic viability Placer County's agricultural operations.

Policy 7.C.2 The County shall promote agricultural operations that provide a competitive edge to Placer County farmers.

Policy 7.C.3 The County shall support opportunities to promote and market agricultural products grown or processed within Placer County (such as Farmers' Markets) as a part of the economic development activities of local agencies.

Policy 7.C.5 The County shall permit on-farm product handling and selling. The County shall permit stands for the sale of agricultural products in any agricultural land use designation to promote and market those agricultural products grown or processed in Placer County. Secondary and incidental sales of agricultural products grown elsewhere may be permitted subject to appropriate approvals.

Policy 7.C.6 The County shall ensure that land use regulations do not arbitrarily restrict potential agricultural-related enterprises which could provide supplemental sources of income for farm operators.

Policy 7.C.7 The County shall maintain regulations that exempt certain agricultural buildings from the construction requirements of the California Building Code, subject to limitations on the size, occupancy, location, and use of such structures.

Forest Resources

Goal 7.E To conserve Placer County's forest resources, enhance the quality and diversity of forest ecosystems, reduce conflicts between forestry and other uses, and encourage a sustained yield of forest products.

Policy 7.E.1 The County shall encourage the sustained productive use of forest land as a means of providing open space and conserving other natural resources.

Policy 7.E.2 The County shall discourage development that conflicts with timberland management.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Natural Resources Management Element related to agriculture and forestry resources are applicable to the proposed project.

Soils

Goal 1 Conservation of soils as a valuable natural resource.

Goal 3 Minimize the conversion of soils suitable for agricultural purposes to non-agricultural uses.

Policy 1 Use the existing inventory of important soil types to serve as a means of identifying unique and important resources prior to project development. In the absence of more detailed site specific studies, determination of soil suitability for particular land uses shall be made according to the Soil Conservation Service's Soil Survey of Placer County.

Policy 2 Coordinate with local, state and federal agencies with a trustee responsibility for the management of natural resources when land development activities affect soil resource conservation and management efforts.

Policy 7 Discourage the conversion from agricultural uses to non-agricultural uses by encouraging Williamson Act Preserves and by maintaining large minimum parcel sizes in agricultural areas in order to prevent fragmentation of land ownership patterns that lead to the loss of open space and economic agricultural units.

Open Space

Goal c Recognize agricultural lands as a resource and seek to protect these areas from urban encroachments.

Goal f Identify all economically valuable resources, including mineral deposits, soils conducive to agricultural uses, and those open space areas which add to the attractiveness of the region and are vital to its development as an agricultural and rural residential community. Provide for the conservation, utilization, and development of mineral resources consistent with sound conservation and reclamation practices.

Policy b Preserve agricultural lands as an economically viable land use, and for the purposes of open space, wildlife habitat, buffering, flood control and soil conservation.

Placer Legacy Open Space and Conservation Program

The Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program) was adopted in June 1998 to protect and conserve open space and agricultural lands in Placer County.[12] The Placer Legacy Program implements the goals, policies, and programs of the 1994 Placer County General Plan and supplements existing open space and conservation programs. The Placer Legacy Program also provides important resource information to guide and direct decisions on the preparation of environmental documents for compliance with CEQA and for discretionary land use entitlements being examined by County staff. The objectives of the Placer Legacy Program include the following:

- Maintain a viable agricultural segment of the economy;
- Conserve natural features necessary for access to a variety of outdoor recreation opportunities;
- Retain important scenic and historic areas;
- Preserve the diversity of plant and animal communities;
- Protect endangered and other special status plant and animal species;
- Separate urban areas into distinct communities; and
- Ensure public safety.

[12] Placer County. *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report.* June 2000.

For implementation purposes, the County was divided into ten study areas based on common geographic and political boundaries. The development of the implementation measures was based on an assessment of each area's existing open space resources, development trends, stressors and conflicts, and opportunities for Placer Legacy Program involvement. The project site is located within the Loomis Basin Study Area. Placer Legacy Program implementation measures for the Loomis Basin Study Area that are pertinent to agricultural and forestry resources on and in the vicinity of the project site are listed below:

LB-1 Work with farmers and ranchers to protect agricultural lands outside of designated development areas through the use of conservation easements.

LB-2 Support the County's Right-To-Farm Ordinance provisions.

LB-3 Promote sales of locally grown produce and help create additional markets for agriculture.

LB-4 Provide resources to assist farmers and ranchers with tax, estate and easement planning.

LB-7 Provide incentives for property owners to enhance fragmented and degraded oak woodlands and riparian zones throughout the rural residential landscape.

LB-17 Identify and protect important historic orchards and Penryn palm trees.

LB-18 Identify strategic opportunities to create green areas between urban, rural residential and agricultural uses.

LB-19 Work with the County, cities and proposed new development along urban edges to create permanent buffers or separators between incompatible uses.

Placer County Code

The applicable sections of the Placer County Code related to agriculture and forestry resources are presented below.

Williamson Act Lands Program

Placer County Code Article 17.64 establishes the Placer County Williamson Act Lands Program in compliance with Chapter 7, Part 1, Division 1 of Title 5 of the Government Code (Section 51200 et seq.), otherwise known as the California Land Conservation Act of 1965. The purposes of the program are to protect agricultural lands for the continued production of agricultural commodities and to protect certain other lands devoted to open space uses, in compliance with the Williamson Act.

Pursuant to the requirements set forth in Article 17.64, Resolution 2022-122 established Agricultural Preserves PLN21-00578 and PLN22-00200, as the sites meet the definition of "prime agricultural land," as determined by the County. Placer County Code Section 17.64.020 defines prime agricultural land as any of the following:

1. All land which qualifies for rating as class I or class II in the soil conservation service land capability classifications.
2. Land that qualifies for a rating of 80 through 100 in the Storie Index Rating.

3. Land that supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.
4. Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200.00) per acre.
5. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200.00) per acre for three of the previous five years.

Pursuant to Resolution 2022-122, PLN21-00578 and PLN22-00200 meet criterion 4 of the prime agricultural land definition set forth in Placer County Code Section 17.64.020.

Placer County Right-to-Farm Ordinance

Placer County has adopted a Right-to-Farm Ordinance (Section 5.24.040 of the Placer County Code) to minimize loss of the County's commercial agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance. The provisions of the Right-to-Farm Ordinance are as follows:

A. It is the declared policy of the county of Placer to preserve, protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. When nonagricultural land uses extend into the agricultural areas, agricultural operations often become the subject of nuisance suits. As a result, agricultural operations are sometimes forced to cease or are substantially curtailed. Others may be discouraged from making investments in agricultural improvements. It is the purpose of this section to reduce the loss to the county of its commercial agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance.
B. No agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than one year if it was not a nuisance at the time it began.
C. For purpose of this section, the term "agricultural activity, operation, or facility, or appurtenances thereof" shall include, but not be limited to, the cultivation and tillage of soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, Christmas trees, viticulture, apiculture, nursery stock, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and game birds, and any practices performed by a farmer or on a farm as incident to or in conjunction with such farming operations, including preparation for market, delivery to storage, or to market, or to carriers for transportation to market.
D. For the purpose of this section, commercial "agriculture" means those agricultural lands in designated areas, or those lands that are within the California Land Conservation Act, or within a timber preserve zone or those lands that produce a gross annual income of four thousand five hundred dollars ($4,500.00) from the sale of agricultural products.
E. Each prospective buyer of property in unincorporated Placer County shall be informed by the seller or his/her authorized agent of the right-to-farm ordinance.

The seller or his/her authorized agent will keep on file a disclosure statement signed by the buyer with the escrow process.

F. Whenever a building designated for residential occupancy is to be located on property in the unincorporated area of Placer County, the owners of the property, or their authorized agent, shall acknowledge receipt of the right-to-farm ordinance. (Ord. 4983-B, 1999: prior code § 5.715)

5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to agriculture and forestry resources. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, a significant impact would occur if the proposed project would result in any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]);
- Result in the loss of forest land or conversion of forest land to non-forest use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use; or
- Conflict with General Plan or other policies regarding land use buffers for agricultural operations.

Method of Analysis

Evaluation of potential impacts of the proposed project on agriculture and forestry resources is based on the following: the Placer County General Plan, the associated EIR, the Placer Legacy Program, the NRCS Web Soil Survey, and the FMMP online mapping system. Soil data from the FMMP was used to characterize the amount of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance within the project site boundaries. The project's proposed area of disturbance was overlaid with the known on-site agricultural resources to determine the overall impact to agricultural land that would occur during development of the proposed project. The standards of significance listed above are used to delineate the significance of any potential impacts.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

5-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Based on the analysis below, *no impact* would occur.

For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland constitute 'agricultural land.' Pursuant to the California DOC Important Farmland Finder, the project site is mapped entirely as Other Land and is not adjacent to any land that constitutes agricultural land. The DOC defines Other Land as land not included in any other FMMP mapping category, including those that meet the definition of agricultural land. Therefore, the project site does not constitute Farmland under CEQA, and development of the site would not result in the conversion of Farmland to a non-agricultural use.

Based on the above, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Thus, ***no impact*** would occur.

Mitigation Measure(s)
None required.

5-2 Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy. Based on the analysis below, the impact is *less than significant*.

The project site is zoned F-B-X 20 (APN 031-220-061) and RA-B-100 (APNs 032-124-080 and 032-124-044). Pursuant to Placer County Code Section 17.10.010, the purpose of the F zone is to provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. In addition, Placer County Code Section 17.44.010 establishes that the purpose of the RA zoning district is to stabilize and protect the rural residential characteristics of the area to which the zone is applied and to promote and encourage a suitable environment for family life, including agricultural uses.

The proposed project would consist of a full-production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. When fully operational, the winery would process grapes grown within the 44.14-acre parcel area on which the project site is located, as well as grapes purchased from specialized vineyards. The proposed structures, including the octagon building and processing/warehouse building, would be constructed within the portion of the site zoned F-B-X 20. Only the gate house, gated entry, and access road would be constructed within the RA-B-100 portion of the site. According to Table 2 of the County's

Winery and Farm Brewery Ordinance (Placer County Code Section 17.56.330), wine tasting facilities in agricultural zoning districts are allowed with a zoning clearance. As detailed in Section 17.06.050 of the Placer County Code, zoning clearance is a routine land use approval that involves County staff verifying that a proposed development satisfies all applicable zoning requirements (e.g., setbacks, height limits, parking requirements, etc.) and is required by the Placer County Zoning Ordinance for land uses that are consistent with the basic purposes of a particular zone (e.g., houses in residential zones) and are unlikely to create any problems that would not be adequately handled by applicable development standards.

Through County approval of a Conditional Use Permit (CUP) and a Zoning Text Amendment to add height limit exceptions to the County's Winery and Farm Brewery Ordinance (Placer County Code Section 17.56.330), the proposed project would be consistent with the uses and standards required of development within the F zoning district. More specifically, the CUP would allow for operation of the proposed accessory restaurant, and the Zoning Text Amendment would modify Placer County Code Section 17.56.330 to allow the octagon building to be constructed at a height of 75 feet from the finished grade. In addition, the CUP would be required to increase the maximum attendance at one time for Agricultural Promotional Events from 50 to 75 people. Furthermore, the winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery, primarily in the form of small agricultural promotional events. In general, such events would consist of professional events and/or gatherings that support the promotion of wine produced on-site and at other wine-making facilities in Placer County, as well as the promotion of wine and food pairings, with the focus of the latter on locally sourced ingredients. As such, the proposed project would be consistent with the F zoning district's intent of facilitating commercial agricultural operations that also accommodate necessary services to support agricultural uses and the RA zoning district's purpose of protecting the rural residential characteristics of the project region by limiting development in this area to a gate house, gated entry, and access road. Therefore, the proposed project would not conflict with existing zoning for agricultural use, and a less-than-significant impact would occur.

Placer County Code Section 5.24.040 establishes the County's Right-to-Farm policy, which serves to minimize loss of the County's commercial agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance. As discussed above, when fully operational, the proposed project would consist of professional events and/or gatherings that support the promotion of wine produced on-site and at other wine-making facilities in Placer County, as well as the promotion of wine and food pairings, with the focus of the latter on locally sourced ingredients. As part of the proposed wine production, the facility would process grapes grown within the 44.14-acre parcel area (where the project site is located) as well as grapes purchased from specialized vineyards. As such, the proposed project would serve to complement the existing vineyards within the parcel area and would not lead to circumstances under which existing adjacent agricultural operation would be deemed to constitute a nuisance. Therefore, the proposed project would not conflict with the County's Right-to-Farm policy.

As discussed above, on June 14, 2022, the Board of Supervisors adopted Resolution No. 2022-122 rescinding Agricultural Preserve 148 and simultaneously establishing

Agricultural Preserves PLN21-00578 and PLN22-00200, as shown in Figure 5-4. PLN22-00200 governs APN 031-220-061, a portion of which contains the approximately 18-acre project site (see Figure 3-2 and Figure 5-3 of the Project Description). According to Resolution 2022-122, the inclusion of the northernmost project parcel (APN 031-220-061), where the proposed winery operations would occur, in an Agricultural Preserve and Williamson Act Contract is consistent with the Placer County General Plan, HBPCP, and the applicable provisions of State law, because such action would result in conservation of valuable agricultural land and improve the financial viability of Placer County's agricultural economy. Land Conservation Agreement PLN22-00200 governing the northernmost parcel specifies compatible uses, among which include facilities for the purpose of selling products produced on the land, together with accessory facilities, sales of agricultural products produced off the premises, provided that the sale of such products is incidental and secondary to the sale of agricultural products produced on the premises. The second level of the octagon building would also include an approximately 3,500 sf residence that would be used by the owner primarily during harvest times. The residence is anticipated to be a compatible use, as defined in the Land Conservation Agreement PLN22-00200 (13.1) and Government Code Section 51250(b), given that the residential unit would be related to an agricultural use. Compatibility would ultimately be determined by the Placer County Agricultural Commission.

Based on the above, the proposed project would not conflict with existing zoning for agricultural use, a Williamson Act Contract, or the County's Right-to-Farm Policy, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]), or result in the loss of forest land or conversion of forest land to non-forest use. Based on the analysis below, the impact is *less than significant*.

Pursuant to PRC Section 12220(g), "forest land" is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." As defined by PRC Section 4526, "timberland" is "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees." Commercial species are determined by the State Board of Forestry and Fire Protection. Finally, according to Government Code Section 51104(g), a "Timberland production zone" is defined as "an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber,

or for growing and harvesting timber and compatible uses, as defined in [Government Code Section 51104] subdivision (h)."

As previously discussed, the project site is currently zoned F-B-X 20 (APN 031-220-061) and RA-B-100 (APNs 032-124-080 and 032-124-044). The F and RA zones are distinct from the County's FOR and TPZ zoning districts, which are detailed in Sections 17.12.010 and 17.16.010 of the Placer County Code. The FOR zone is intended to designate portions of the mountainous areas of Placer County where the primary land uses will relate to the growing and harvesting of timber and other forest products, together with public and commercial recreational uses. The purpose of the TPZ zone is to encourage prudent and responsible forest resource management and the continued use of timberlands for the production of timber products and compatible uses. Therefore, the proposed project would not conflict with the County's existing zoning or cause rezoning of FOR and/or TPZ zoned lands.

As discussed under Impact 7-5 in the Biological Resources chapter of this EIR, the project site contains 6.2 acres of blue oak woodlands, 4.2 acres of which would be removed or impacted by the proposed project. Thus, the project site could be considered to meet the 10 percent native tree cover criterion for "forest land," as established by PRC Section 12220(g). However, as discussed under Impact 7-5, the proposed project would be subject to the applicable Placer County Conservation Program (PCCP) requirements. The PCCP identifies oak woodland as a key natural community that defines the major biological values of the PCCP. Pursuant to the PCCP, impacts to oak woodland are subject to payment of PCCP land conversion fees, which would fully address potential forest land/oak woodland impacts through off-site purchase of oak woodland preserves. Further discussion of PCCP fee requirements is provided in the Biological Resources chapter of this EIR. Furthermore, although the project site could be considered to meet the definition of "forest land" as set forth by PRC Section 12220(g), the site is not currently zoned for such use.

Based on the above, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-4 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Based on the analysis below, the impact is *less than significant*.

As discussed under Impact 5-1, for environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, constitute 'agricultural land.' Pursuant to the California DOC Important Farmland Finder, the project site does not contain any of the aforementioned categories

and is entirely composed of land designated as Other Land. Therefore, the proposed project would not result in the conversion of Farmland to non-agricultural use.

According to Placer County Code Section 17.64.020, "prime agricultural land" in compliance with Government Code Section 51200 is defined as follows:

> "Prime agricultural land" means any of the following, in compliance with Section 51201 of the Act:
>
> 1. All land which qualifies for rating as class I or class II in the soil conservation service land capability classifications.
> 2. Land that qualifies for a rating of 80 through 100 in the Storie Index Rating.
> 3. Land that supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.
> 4. Land planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200.00) per acre.
> 5. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200.00) per acre for three of the previous five years.

As stated in Resolution 2022-122, Agricultural Preserve PLN22-00200 is defined as "prime agricultural land" in accordance with Placer County Code Section 17.64.020 because the land is planted with fruit or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than $200 per acre. Importantly, the vines on Agricultural Preserve PLN22-00200, which meet the definition of "prime agricultural land" in Section 51201 of the Williamson Act, are outside of the project site boundaries, as delineated on Figure 3-2 of the Project Description chapter. Therefore, the proposed project would not convert the aforementioned areas from productive use. Furthermore, as discussed in Impact 5-2, the winery uses are anticipated to be compatible with Agricultural Preserve PLN22-00200.

With respect to the conversion of forest land to non-forest use, as discussed under Impact 5-3, the project site is not currently zoned FOR or TPZ. Furthermore, the proposed project would be subject to payment of PCCP land conversion fees, which would fully address potential forest land/oak woodland impacts through off-site purchase of oak woodland preserves.

Based on the above, the proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

5-5 Conflict with General Plan or other policies regarding land use buffers for agricultural operations. Based on the analysis below, the impact is *less than significant*.

The Placer County General Plan establishes Land Use Buffer Zone Standards for several types of adjacent development, including requirements for agriculture/timberland buffers, industrial/residential buffers, and public facility buffers.[13] The buffers are intended to separate incompatible land uses from surrounding areas, such as land uses where noise associated with vehicles and equipment could be substantial, the use of hazardous materials such as in manufacturing processes occurs, or where truck traffic and otherwise heavy traffic volumes occur.

With respect to land use buffers for agricultural operations, the County's requirements for agriculture/timberland buffers serve to separate urban uses (particularly residential) from lands designated Agriculture or Timberland, where noise from machinery, dust, the use of fertilizers and chemical sprays, and other related agricultural/timber harvesting activities would create problems for nearby residential and other sensitive land uses. The buffers also serve to minimize disturbance of agricultural operations from nearby urban or suburban uses, including trespassing by nearby residents and domestic animals.

The General Plan does not require buffer zones for wine-production facilities, winery tasting rooms, or restaurants, which are not considered a sensitive land use. The recently planted vineyards within the greater parcel area, on which the project site is located, are not part of the proposed project. As such, the proposed project would not conflict with the County's requirements for agriculture/timberland buffers. Furthermore, while the project's proposed uses would not be subject to buffer standards, compatibility of the proposed uses with adjacent rural residential uses is addressed throughout the technical chapters of this EIR. For example, as discussed in Chapter 4, Aesthetics, of this EIR, the proposed project would introduce additional sources of light and/or glare to the project region in the form of exterior light sources. However, pursuant to Placer County Code Section 17.54.070(A)(2)(i), the project would be required to comply with all applicable standards set forth by the Placer County Design Guidelines related to light pollution. Additionally, the proposed project would implement Mitigation Measure 4-3, which would require the submittal of a lighting plan for the project to Placer County for review and approval.

In addition, according to the Environmental Noise & Vibration Assessment prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Chapter 14, Noise, of this EIR), the proposed project would not produce noise levels exceeding the performance standards established by Placer County at existing noise-sensitive uses. As such, the proposed project would not result in the development of incompatible uses from a noise perspective. Furthermore, while Chapter 16, Transportation, of this EIR concludes that the proposed project could substantially increase hazards to vehicle safety due to a geometric design feature or incompatible uses at the Taylor

[13] Placer County. *Countywide General Plan Policy Document, Part 1, Land Use/Circulation Diagrams and Standards* [pg. 19]. August 1994 (updated May 2013).

Road/Callison Road intersection, Mitigation Measure 16-3 would require incorporation of a left-turn lane at the aforementioned intersection that would be designed in accordance with applicable standards and requirements, which would reduce the potential impact to a less-than-significant level. Overall, through compliance with applicable regulations and standards set forth by Placer County and the mitigation measures set forth in this EIR, the proposed uses would be compatible with adjacent rural residential uses in the project vicinity.

Based on the above, the proposed project would not conflict with the Placer County General Plan or other policies regarding land use buffers for agricultural operations, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Additional detail regarding the cumulative setting is included in Chapter 20, Statutorily Required Sections, of this EIR.

5-6 Involve changes in the existing environment which, due to their location or nature, could cumulatively result in loss of Farmland to non-agricultural use. Based on the analysis below, the cumulative impact is *less than significant*.

The cumulative analysis in this EIR is based upon a summary of projections contained in the Bickford Ranch Specific Plan (BRSP) EIR and the HBPCP. The BRSP is a County-approved master planned community anticipated for implementation over three phases on 1,942.5 acres located west of project site. At buildout, the BRSP will generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. As such, the County-approved BRSP will result in the conversion of undeveloped land in the project region to urban uses. Additionally, the HBPCP includes an area of approximately 25 square miles located west and south of the project site. Buildout of the HBPCP area would similarly result in the conversion of undeveloped land to urban uses, albeit, at a reduced scale relative to the BRSP area.

According to the BRSP EIR, the USDA Resource Conservation Service Important Farmland Map designated the entire BRSP site as Farmland of Local Importance, with limited water availability.[14] Due to the site's predominantly Class VI and VII soils, which

[14] Placer County. *Bickford Ranch Specific Plan Revised Draft Environmental Impact Report*. [pg. 4-3]. Adopted December 18, 2001.

indicate the soils either have severe limitations or very severe limitations, the BRSP area does not meet the criteria to be designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In addition, the BRSP area is not under a Williamson Act contract. As previously discussed, for environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland constitute 'agricultural land.' As such, while development of the BRSP will result in the conversion of undeveloped land in the project region to urban uses, construction of the master planned community will not result in the loss of Farmland to non-agricultural use.

With respect to buildout of the HBPCP, prior to the community plan's approval, the land use pattern of the HBPCP area had already been changing over the preceding decades from rural-agricultural to residential development on small acreages. As such, land previously used for agricultural purposes in the HBPCP had already been undergoing conversion to non-agricultural uses. Pursuant to the HBPCP Community Design Element, the HBPCP area contains nine land use designations: Rural Estate (RE), Rural Residential (RR), Low Density Residential (LDR), Medium Density Residential (MDR), High Density Residential (HDR), Open Space (OS), Riparian Drainage (RD), Penryn Parkway (PP), and Industrial (IND). In regard to agricultural land within the HBPCP, approximately 507 acres of land under Williamson Act contracts were located within the plan area's RE designation in land zoned Agriculture (AG) combining district at the time of the HBPCP's approval. However, the HBPCP found that through compliance with County General Plan policies, agricultural properties in the HBPCP area would not be prematurely converted to non-agricultural uses. Furthermore, development would be required to comply with the goals and policies set forth in the HBPCP and the County General Plan intended to preserve the continued use of agricultural lands. Finally, of the 507 acres under Williamson Act contracts, 462 acres (91 percent) had already filed a "notice of non-renewal" at the time of the HBPCP's approval, with such lands scheduled to not be under a Williamson Act contract by 1994. Given the development that has occurred within the HBPCP area since the community plan's approval, required compliance with General Plan and HBPCP goals and policies, and the amount of land in the plan area not currently under Williamson Act contracts, buildout of the HBPCP area would not result in the substantial cumulative loss of Farmland to non-agricultural use.

With respect to the proposed project, as discussed under Impact 5-1 above, the project site does not contain Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In addition, the vines on Agricultural Preserve PLN22-00200, which meet the definition of "prime agricultural land" in Section 51201 of the Williamson Act, are outside of the project site boundaries, as delineated on Figure 3-2 of the Project Description chapter of this EIR. Therefore, the proposed project would not convert the aforementioned areas from productive use. Furthermore, as discussed under Impact 5-2, the winery uses are anticipated to be compatible with Agricultural Preserve PLN22-00200.

Based on the above, cumulative development would not result in the loss of Farmland to non-agricultural use, and the proposed project would complement the existing agricultural operations within the parcel area and be consistent with the site's F and RA zoning districts. Therefore, the cumulative impact would be ***less than significant***.

Mitigation Measure(s)
None required.

5-7 Involve changes in the existing environment which, due to their location or nature, could cumulatively result in loss of forest land. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

With respect to the BRSP, the BRSP area includes 1,416 acres of blue oak woodland, and three acres of valley oak woodland (see Figure 13-1 of the BRSP EIR), as well as approximately 78,700 trees, including those within the aforementioned woodland areas. However, as noted in the 2015 Addendum to the BRSP EIR, following the 2004 project approvals for the BRSP, site development activities commenced, including initiation of mass grading, tree removal, and wetland species mitigation.[15] Consistent with the 2004 project approvals, approximately 8,200 oak trees were removed and approximately 21,000 oak seedlings were planted in the northwest portion of the BRSP site as mitigation for trees removed. The seedlings failed due to lack of irrigation. The Bickford Ranch Tree Mitigation Plan prepared for the 2014 BRSP addresses the failed plantings and includes mitigation to address impacts of the BRSP and compensation for previous failed mitigation.

With respect to buildout of the HBPCP, blue oak woodlands, interior oak woodlands, and valley oak savanna are the dominant oak communities that occur throughout the plan area. The HBPCP found that buildout of the community plan area would result in the loss of oak woodland habitats and individual oak trees as part of building construction or through indirect impacts such as soil disturbance, soil compaction, and overwatering. Although the HBPCP could not quantify the extent of tree loss, the community plan concluded that buildout of the plan area could substantially contribute to the loss of oak communities. Based on the above, due to the loss of tree resources in the BRSP and HBPCP as part of buildout of each plan area, cumulative development could result in a significant impact with respect to the loss of forest land.

However, as discussed under Impact 5-3 above, although the project site contains 6.2 acres of blue oak woodlands, 4.2 acres of which would be removed or impacted by the proposed project, the project would be subject to fees and requirements set forth by the PCCP. The PCCP identifies oak woodland as a key natural community that defines the major biological values of the PCCP. Pursuant to the PCCP, impacts to oak woodland are subject to payment of PCCP land conversion fees, which would fully address potential forest land/oak woodland impacts through off-site purchase of oak woodland preserves. Buildout of other planned land uses within the HBPCP would similarly be required to pay PCCP land conversion fees that would be used to establish the PCCP preserve system.

[15] Placer County. *Environmental Review Checklist: Bickford Ranch Specific Plan Amendment*. [pg. 3-49]. October 2015.

CEQA Guidelines Section 15064, Subdivision (h)(5), states, "[…] the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

The above discussion provides substantial evidence that, while the combined effects on the conversion of forest land resulting from approved/planned development throughout the County could be considered significant, the proposed project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

6. Air Quality and Greenhouse Gas Emissions

6. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

6.1 INTRODUCTION

The Air Quality and Greenhouse Gas Emissions chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, and potential impacts related to greenhouse gas emissions (GHGs) and climate change. The chapter includes a discussion of the existing air quality and GHG setting, construction-related air quality impacts resulting from grading and equipment emissions, direct and indirect emissions associated with operations of the project, the impacts of these emissions on both the local and regional scale, and mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based on information from the Placer County General Plan[1] and associated EIR,[2] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[3] In addition, this chapter relies on guidance from the Placer County Air Pollution Control District's (PCAPCD) CEQA Air Quality Handbook,[4] PCAPCD's Review of Land Use Projects Under CEQA,[5] the Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy (PCSP),[6] and the technical analysis performed by Raney Planning and Management, Inc. (see Appendix C).

6.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, and sensitive receptors are discussed. In addition to the information pertaining to air quality, information related to climate change and GHGs is provided.

Air Basin Characteristics

The project site is located in western Placer County, which falls within the Sacramento Valley Air Basin (SVAB), within the jurisdictional boundaries of the PCAPCD. Air flows into the SVAB through the Carquinez Strait, moves across the Delta and carries pollutants from the heavily populated San Francisco Bay Area into the SVAB. The climate is characterized by hot, dry summers and cool, rainy winters. Characteristic of SVAB winter weather are periods of dense and persistent low-level fog, which are most prevalent between storms. From May to October, the region's intense heat and sunlight lead to high ozone concentrations. Prevailing winds are from the south and southwest, and as a result of prevailing winds coming generally from south to southwest, air quality in the area is heavily influenced by mobile and stationary sources of air pollution located upwind in the Sacramento Metropolitan Area.

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 21, 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
4 Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
5 Placer County Air Pollution Control District. *Review of Land Use Projects Under CEQA*. October 13, 2016.
6 Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.

Most precipitation in the SVAB results from air masses moving in from the Pacific Ocean during the winter months. Storms usually move through the area from the west or northwest. During the winter rainy season (November through February) over half the total annual precipitation falls while the average winter temperature is a moderate 49 degrees Fahrenheit. During the summer, daytime temperatures can exceed 100 degrees Fahrenheit. Dense fog occurs mostly in mid-winter and rarely in the summer. Daytime temperatures from April through October average between 60 and 80 degrees Fahrenheit with low humidity. The inland location and surrounding mountains shelter the valley from much of the ocean breeze that keeps the coastal regions moderate in temperature. The only breech in the mountain barrier is the Carquinez Strait, which exposes the midsection of the valley to the coastal air mass.

Air quality in Placer County is also affected by inversion layers, which occur when a layer of warm air traps a layer of cold air, preventing vertical dispersion of air contaminants. The presence of an inversion layer results in higher concentrations of pollutants near ground level. Summer inversions are strong and frequent, but are less troublesome than those that occur in the fall. Autumn inversions, formed by warm air subsiding in a region of high pressure, have accompanying light winds that do not provide adequate dispersion of air pollutants.

Air quality in the project vicinity is influenced by both local and distant emission sources. Air pollutant sources in the immediate project vicinity include emissions from vehicle traffic on nearby roadways, as well as from trains along the Union Pacific Railroad (UPRR) tracks north and south of the project site. Other sources of air pollutants in the general area include activities associated with commercial, residential, and agricultural land uses.

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which AAQS have been established are called “criteria” pollutants. Table 6-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 6-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and particulate matter (PM).

A description of each criteria pollutant and its potential health effects is provided in the following section.

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_X) emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. In general, the primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment.

Table 6-1
Summary of Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	• Eye irritation • Wheezing, chest pain, dry throat, headache, or nausea • Aggravated respiratory disease such as emphysema, bronchitis, and asthma	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream • Impaired vision, reduced alertness, chest pain, and headaches • Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	• Lung irrigation and damage • Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels.	• Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	• Aggravation of chronic respiratory disease • Heart and lung disease • Coughing • Bronchitis • Chronic respiratory disease in children • Irregular heartbeat • Nonfatal heart attacks	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	• Loss of appetite, weakness, apathy, and miscarriage • Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract	Industrial sources and combustion of leaded aviation gasoline.

Sources:

- ***California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed July 2022.***
- ***Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at: sparetheair.com. Accessed July 2022.***
- ***California Air Resources Board. Glossary of Air Pollution Terms. Available at: https://ww2.arb.ca.gov/glossary. Accessed July 2022.***

Table 6-2
Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM_{10})	Annual Mean	20 ug/m^3	-	Same as primary
	24 Hour	50 ug/m^3	150 ug/m^3	
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	12 ug/m^3	12 ug/m^3	15 ug/m^3
	24 Hour	-	35 ug/m^3	Same as primary
Lead	30 Day Average	1.5 ug/m^3	-	-
	Calendar Quarter	-	1.5 ug/m^3	Same as primary
Sulfates	24 Hour	25 ug/m^3	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles	8 Hour	see note below	-	-

ppm = parts per million
ppb = parts per billion
µg/m^3 = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: California Air Resources Board. Ambient Air Quality Standards. May 4, 2016. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed July 2022.

Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Reactive Organic Gas

ROG refers to several reactive chemical gases composed of hydrocarbon compounds typically found in paints and solvents that contribute to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.

Oxides of Nitrogen

NO_X are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO_X results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO_X. NO_X reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO_X emissions are a major component of acid rain. Health effects related to NO_X include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_X, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of PM_{10}.

Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about particles that are 10 micrometers in diameter or smaller (PM_{10}) because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. USEPA groups particle pollution into three categories based on their size and where they are deposited:

- "Inhalable coarse particles ($PM_{2.5-10}$)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5-10}$ is deposited in the thoracic region of the lungs.
- "Fine particles ($PM_{2.5}$)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. $PM_{2.5}$ particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of $PM_{2.5}$.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the level of the AAQS may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 parts per million [ppm] can cause death).

Vinyl Chloride

Vinyl chloride (C_2H_3Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

Visibility reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators, which are subject to PCAPCD stationary source permit requirements. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including ROG and NO_X. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.[7]

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of $PM_{2.5}$. As a California statewide average, DPM comprises about eight percent of $PM_{2.5}$ in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources

[7] California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.

throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily-traveled roadways. Such areas are often located near highly populated areas. Thus, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., $PM_{2.5}$) and UFPs. The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.[8] The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.[9] UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs. Considering that UFPs are a subset of DPM, and DPM represents a subset of $PM_{2.5}$, estimations of either concentrations or emissions of $PM_{2.5}$ or DPM include UFPs.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer can include birth defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

Naturally Occurring Asbestos

Another concern related to air quality is naturally occurring asbestos (NOA). Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Because asbestos is a known carcinogen, NOA is considered a TAC. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock; construction activities in ultramafic rock deposits; or rock quarrying activities where ultramafic rock is present.

[8] Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.
[9] South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.

NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to the Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to exist in the project area.[10]

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. The FCAA and CCAA require that the CARB, based on air quality monitoring data, designate portions of the State where the federal or State AAQS are not met as "nonattainment areas." Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The CCAA requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or, provide for adoption of "all feasible measures on an expeditious schedule."

As presented in Table 6-3, under the CCAA, the SVAB has been designated nonattainment for the State one-hour ozone, State and federal eight-hour ozone and State PM_{10} standards. The County is designated attainment or unclassified for all other AAQS. Due to the nonattainment designations, the PCAPCD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail in the Regulatory Context section of this chapter.

Local Air Quality Monitoring

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Auburn-Atwood Rd station, which is located approximately six miles northeast of the project site. Table 6-4 presents the number of days that the State and federal AAQS were exceeded for the three-year period from 2018 to 2020. Due to the limited data available from the Auburn-Atwood Rd station, Table 6-4 also includes information from the next closest station: the Roseville-N Sunrise Blvd station.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions. One of the most important factors influencing the

[10] California Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor.

Table 6-3
Placer County Attainment Status Designations

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1 Hour	**Nonattainment**	-
	8 Hour	**Nonattainment**	**Nonattainment**
Carbon Monoxide	1 Hour	Attainment	Attainment
	8 Hour	Attainment	Attainment
Nitrogen Dioxide	Annual Mean	Attainment	Attainment
	1 Hour	Attainment	Unclassified
Sulfur Dioxide	Annual Mean	Attainment	Attainment
	24 Hour	Attainment	Attainment
	1 Hour	Attainment	Attainment
Respirable Particulate Matter (PM_{10})	Annual Mean	**Nonattainment**	-
	24 Hour	**Nonattainment**	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	Attainment	Attainment
	24 Hour	-	**Nonattainment***
Lead	30 Day Average	Attainment	-
	Calendar Quarter	-	Attainment

Note: The Sacramento area was designated as nonattainment for the federal 24-hour $PM_{2.5}$ standard in 2009. Because of regional collaborative efforts, the Sacramento area's local air districts were able to submit a clean data finding report to the U.S. EPA in May 2012, and were issued an attainment determination by U.S. EPA for the Sacramento $PM_{2.5}$ nonattainment area in 2013.

Source: Placer County Air Pollution Control District. CEQA Air Quality Handbook [Table 1-1]. November 21, 2017.

Table 6-4
Air Quality Data Summary (2018-2020)

Pollutant	Standard	Days Standard Was Exceeded		
		2018	2019	2020
1-Hour Ozone	State	4*	1	3
	Federal	0*	0	1
8-Hour Ozone	State	11*	8	23
	Federal	11*	8	22
24-Hour $PM_{2.5}$	Federal	11.6	0	27.3
24-Hour PM_{10}	State	--	2.0*	38.0*
	Federal	2.0*	0*	5.3*
1-Hour Nitrogen Dioxide	State	0*	0*	0*
	Federal	0*	0*	0*

Notes:
-- indicates that sufficient data was not available to determine the value.
* indicates that the values are presented for the Roseville-N Sunrise Blvd station.

Source: California Air Resources Board. Aerometric Data Analysis and Management (iADAM) System. Available at: http://www.arb.ca.gov/adam/welcome.html. Accessed July 2022.

Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to, wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. The project site is not located in the vicinity of any such land uses.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. The nearest sensitive receptors to the project site are the rural residences surrounding the project site. The closest residence to the disturbance area is located approximately 150 feet south of where construction activities would occur.

Greenhouse Gas Emissions

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the Earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

The primary GHG emitted by human activities is CO_2, with the next largest components being CH_4 and N_2O. A wide variety of human activities result in the emission of CO_2. Some of the largest sources of CO_2 include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH_4 emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N_2O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. Electricity generation is the largest single-source of GHG emissions, and transportation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.[11]

[11] U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: https://19january2017snapshot.epa.gov/ghgemissions/sources-greenhouse-gas-emissions_.html. Accessed July 2022.

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO_2 by the Earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

Global Warming Potential

Global warming potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO_2. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas relative to that of CO_2. Each gas's GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO_2, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO_2, as shown in Table 6-5.

Table 6-5
GWPs and Atmospheric Lifetimes of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)
Carbon Dioxide (CO_2)	See footnote[1]	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

[1] For a given amount of CO_2 emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.

Source: USEPA. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021.

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO_2. The atmospheric lifetimes of such GHGs are estimated by the USEPA to vary from 50 to 200 years for CO_2, to 50,000 years for CF_4. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO_2 equivalents ($MTCO_2e$), which is calculated based on the GWP for each pollutant.

Effects of Global Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The Intergovernmental Panel on Climate Change's (IPCC) Climate Change 2021: The Physical

Science Basis report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.[12] Signs that global climate change has occurred include:

- Warming of the atmosphere and ocean;
- Diminished amounts of snow and ice;
- Rising sea levels; and
- Ocean acidification.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed, including:

- An increase in annual average air temperature with record warmth;
- More frequent extreme heat events;
- More extreme drought;
- A decline in winter chill; and
- An increase in variability of statewide precipitation.

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems.

In Placer County, specifically, effects of climate change will be more localized. Such hazards include agriculture and forestry pests and diseases, avalanche, drought, extreme heat, flooding, fog, human health hazards, landslides, severe weather, severe winter weather, and wildfire. Some hazards, such as wildfire and drought, relate directly to the occurrence of other hazards, such as agriculture and forestry pests and diseases, landslides, and flooding. Placer County is currently experiencing some of the aforementioned changes, and others may not occur for several decades.[13]

[12] Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf. Accessed July 2022.

[13] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy* [pg. 14]. January 28, 2020.

6.3 REGULATORY CONTEXT

Air quality and GHG emissions are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the project area and monitoring or reducing GHG emissions are discussed below.

Federal Regulations Related to Air Quality

The following discussion provides a summary of the federal regulations relevant to air quality, organized by pollutant type.

Criteria Pollutants

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric ozone protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants/Toxic Air Contaminants

The 1977 FCAA amendments required the USEPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Regulations Related to GHG Emissions

The following are the federal regulations relevant to GHG emissions.

Federal Vehicle Standards

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams of CO_2 per mile by

model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO_2 emissions by approximately 1.1 billion MT, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000th of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, an Executive Order (EO) was issued on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. In response to the Part One Rule, in December 2021, the U.S. Department of Transportation withdrew its portions of the "SAFE I" rule. As a result, states are now allowed to issue their own GHG emissions standards and zero-emissions vehicle mandates.[14] In addition, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and will result in avoiding more than three billion tons of GHG emissions through 2050.[15]

State Regulations Related to Air Quality

The following discussion summarizes applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (http://www.arb.ca.gov/html/lawsregs.htm).

[14] National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals.* Available at: https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule. Accessed March 2022.

[15] U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed March 2022.

Criteria Air Pollutants

The FCAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the CCAA of 1988, responding to the FCAA, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year. The CAAQS for ozone, CO, SO_2 (one-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 6-2.

Hazardous Air Pollutants/Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner), and involved definition of a list of TACs. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. The State list of TACs includes the federally-designated hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

CARB Air Quality and Land Use Handbook

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.16 The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate-405 and Interstate-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day".[17]

[16] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
[17] *Ibid.*

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: "[l]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind." CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, "[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues".[18]

Diesel Particulate Matter

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions, including DPM, from new and existing diesel-fueled vehicles and engines. The regulation was anticipated to result in an 80 percent decrease in statewide diesel health risk by 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. The aforementioned regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures (ATCMs) exist that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM and NO_X emissions from heavy-duty diesel vehicles. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.[19] The

[18] *Ibid.*

[19] California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. Available at: https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about. Accessed July 2022.

regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_X emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions are not exceeding the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.[20] Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR.

State Regulations Related to GHG Emissions

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change is included below.

State Climate Change Targets

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. The EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also directed the California Environmental Protection Agency (CalEPA) to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

[20] California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. December 10, 2014. Available at: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed July 2022.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive, multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. AB 32 also required that the CARB prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020. The CARB's Scoping Plan is described in further detail below.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's Climate Change Scoping Plan: A Framework for Change (Scoping Plan) to express the 2030 target in terms of MMT CO_2e. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill (SB) 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the State's climate policies. AB 197 also added two members of the Legislature to the Board as non-voting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;

4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR, Section 95480 et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from 2008 levels by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the IPCC, from 427 MMT CO_2e to 431 MMT CO_2e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. Strategies within the 2017 Scoping Plan include implementing renewable energy and energy efficiency measures, increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets (discussed in further detail below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20 percent.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six $MTCO_2e$ per capita by 2030, and no more than two $MTCO_2e$ per capita by 2050, which are consistent with the State's long-term goals. Such goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2019) and the Paris Agreement, which were developed around the scientifically based levels necessary to limit global warming to below an increase of 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. The 2017 Scoping Plan also recognizes the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognizes that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

The update to the 2017 Scoping Plan, the Draft 2022 Scoping Plan Update, has been released for public review, but has not yet been adopted by the CARB.[21]

CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 $MTCO_2e$ per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 $MTCO_2e$ per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

SB 1383

SB 1383 establishes specific targets for the reduction of short-lived climate pollutants (SLCPs) (40 percent below 2013 levels by 2030 for CH_4 and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

EO B-55-18/AB 1279

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future

[21] California Air Resources Board. *2022 Scoping Plan Documents*. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed July 2022.

scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Mobile Sources

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

AB 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for non-commercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent.

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB,

in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

EO N-79-20

EO N-79-20 (September 2020) establishes a Statewide goal that 100 percent of in-state vehicle sales of new passenger cars and trucks shall be zero-emission by the year 2035. The order directed the CARB to develop and propose passenger vehicle and truck regulations requiring increasing volumes of new zero-emission vehicles sold in the State in order to achieve the goal by 2035. In addition, the order required that a Zero-Emissions Vehicle Market Development Strategy be created and updated every three years to ensure coordinated and expeditious implementation of the EO.

Water

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific

directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance (MWELO) that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

Solid Waste

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

Other State Actions

The following State regulations are broadly related to GHG emissions.

SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resource Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that the State government should take to build climate change resiliency.

Local Regulations

The most prominent local regulations related to air quality and GHG emissions are established by the PCAPCD, the Placer County General Plan, and the HBPCP are discussed in further detail below.

Placer County Air Pollution Control District

The PCAPCD regulates many sources of pollutants in the ambient air as well as GHG emissions, and is responsible for implementing certain programs and regulations for controlling air pollutant and GHG emissions to improve air quality in order to attain federal and State AAQS and reduce GHG emissions in compliance with State goals.

Air Quality Attainment Plan

As a part of the SVAB federal ozone nonattainment area, the PCAPCD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the FCAA requirement. The regional air quality management plan is called the State Implementation Plan (SIP) which describes and demonstrates how Placer County, as well as the Sacramento nonattainment area, would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, the PCAPCD, along with the other air districts in the region, prepared the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan), adopted by the PCAPCD on February 19, 2009. The CARB determined that the Ozone Attainment Plan met federal Clean Air Act requirements and approved the Plan on March 26, 2009 as a revision to the SIP. Revisions to the Placer County portion of the SIP or Ozone Attainment Plan were made and

adopted on August 11, 2011. An update to the plan, 2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 Ozone Attainment Plan), was adopted on September 26, 2013, and approved by CARB as a revision to the SIP on November 21, 2013. The 2013 Ozone Attainment Plan was approved by the USEPA on January 9, 2015. In addition, another update was prepared in 2017. The 2017 Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2017 Ozone Attainment Plan) demonstrates how the region will attain the 2008 ozone NAAQS, and includes an updated emissions inventory, sets motor vehicle emissions budgets, and documents the modeling used to support the attainment demonstration.

It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area for ozone with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). On April 30, 2018, the USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the portions of Placer County within the SVAB as nonattainment for the 2015 ozone standards.[22]

PCAPCD Rules and Regulations

All projects under the jurisdiction of the PCAPCD are required to comply with all applicable PCAPCD rules and regulations. In addition, PCAPCD permit requirements apply to many commercial activities (e.g., print shops, drycleaners, gasoline stations), and other miscellaneous activities (e.g., demolition of buildings containing asbestos). The proposed project is required to comply with all applicable PCAPCD rules and regulations, which shall be noted on County-approved construction plans. The PCAPCD regulations and rules include, but are not limited to, the following:

Regulation 2 – Prohibitions

Regulation 2 is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories. The rules are applicable to existing sources as well as new sources. Examples of prohibitory rules include Visible Emissions (Rule 202), Nuisance (Rule 205), Cutback and Emulsified Asphalt Paving Materials (Rule 217), Architectural Coatings (Rule 218), Wood Burning Appliances (Rule 225), and Fugitive Dust (Rule 228).

Regulation 5 – Permits

Regulation 5 is intended to provide an orderly procedure for the review of new sources, and modification and operation of existing sources, of air pollution through the issuance of permits. Regulation 5 primarily deals with permitting major emission sources and includes, but is not limited to, rules such as General Permit Requirements (Rule 501), New Source Review (Rule 502), Emission Statement (Rule 503), Emission Reduction Credits (Rule 504), and Toxics New Source Review (Rule 513).

[22] U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. April 30, 2018.

Placer County Sustainability Plan

The PCSP, adopted by the Placer County Board of Supervisors on January 28, 2020, includes goals and policies for energy efficiency and the reduction of GHGs.[23] Energy efficiency is specifically addressed in Chapter 9, Energy, of this EIR. The PCSP is a planning document that outlines the programs and policies that are recommended for implementation by the community and the County to achieve the most significant GHG emission reductions in unincorporated County. In addition to reducing GHG emissions, implementation of the PCSP is intended to help achieve multiple community-wide goals, such as lowering energy costs, reducing air and water pollution, supporting local economic development, and improving public health and quality of life within Placer County.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to air quality are applicable to the proposed project.

Air Quality – General

Goal 6.F To protect and improve air quality in Placer County.

Policy 6.F.2 The County shall develop mitigation measures to minimize stationary source and area source emissions.

Policy 6.F.3 The County shall support the Placer County Air Pollution Control District (PCAPCD) in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.

Policy 6.F.4 The County shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality.

Policy 6.F.5 The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of Countywide indirect and areawide source programs and transportation control measures (TCM) programs. Project review shall also address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.

Policy 6.F.6 The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.

[23] Placer County Community Development and Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.

Policy 6.F.7 The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.

Policy 6.F.8 The County shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.

Policy 6.F.9 In reviewing project applications, the County shall consider alternatives or amendments that reduce emissions of air pollutants.

Policy 6.F.10 The County may require new development projects to submit an air quality analysis for review and approval. Based on this analysis, the County shall require appropriate mitigation measures consistent with the PCAPCD's 1991 Air Quality Attainment Plan (or updated edition).

Policy 6.F.11 The County shall apply the buffer standards described in Part I of this Policy Document and meteorological analyses to provide separation between possible emission/nuisance sources (such as industrial and commercial uses) and residential uses.

Air Quality – Transportation/Circulation

Goal 6.G To integrate air quality planning with the land use and transportation planning process.

Policy 6.G.1 The County shall require new development to be planned to result in smooth flowing traffic conditions for major roadways. This includes traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.

Policy 6.G.2 The County shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

Policy 6.G.3 The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Policy 6.G.5 The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.

Policy 6.G.6 The County shall require large new developments to dedicate land for and construct appropriate improvements for park-and-ride lots, if suitably located.

Transportation – Non-Motorized Transportation

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.7 The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.

Policy 3.D.9 Consider Complete Streets infrastructure and design features in street design and construction to create safe and inviting environments for all users consistent with the land uses to be served.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Natural Resources Management Element related to air quality and GHG emissions are applicable to the proposed project.

Goal 1 Recognize that clean air and water are essential resources for maintaining a high quality of living. Protect the high quality of air, water, and groundwater resources consistent with adopted federal, state, and local standards.

Goal 2 Protect and improve air quality in the plan area.

Goal 3 Integrate air quality planning with the land use and transportation planning process.

Policy 1 Recognize that clean air is a resource to be protected and improved through project mitigation. The contribution of vegetation and water areas in maintaining the air quality shall not be overlooked in any land use proposals.

Policy 2 Development projects shall be located and designed to conserve air quality and minimize direct and indirect emission of air contaminants. Development proposals shall be submitted to the Placer County Air Pollution Control District to identify the project's air quality impacts prior to consideration by the appropriate decision-making body. Appropriate mitigation measures, including any issuance of an air quality permit to direct emission sources, shall be included in the project proposal.

Policy 3 Encourage new developments to dedicate land and improvements for park-and-ride lots to encourage carpooling, where appropriate.

Policy 4 Consider only plan alternatives and later amendments that reduce emissions to their lowest practical levels.

Policy 5	Implement zoning which provides the opportunity for improved jobs-housing balance.
Policy 6	Implement mitigations for air quality impacts associated with adoption of the Horseshoe Bar/Penryn Community Plan and include them in the monitoring plan.
Policy 7	Utilize zoning regulations to provide a buffer between possible emission/nuisance sources (such as industrial or commercial uses) and residential land uses.
Policy 8	Land development projects which result in 200 or more trip-ends per day may require an air quality analysis to be submitted for review and approval.
Policy 9	Plans under consideration shall contemplate smooth flowing traffic systems for major arteries. This includes traffic signal coordination, parallel roadways and intra-neighborhood connectors where significant reductions in overall emissions can be achieved.

6.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to air quality and GHG emissions are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on the recommendations of PCAPCD and in coordination with the County, consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact related to air quality and GHG emissions is considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- 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 which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations (including localized CO concentrations and TAC emissions);
- Result in other emissions (such as those leading to odors) affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Criteria Pollutant Emissions and Toxic Air Contaminant Emissions

In order to evaluate criteria air pollutant emissions from development projects, the PCAPCD has established significance thresholds for emissions of ROG, NO_X, and PM_{10}. The significance thresholds, expressed in pounds per day (lbs/day), serve as air quality standards in the evaluation of air quality impacts associated with proposed development projects. The PCAPCD's recommended thresholds of significance are listed in Table 6-6. Therefore, if the proposed project's emissions exceed the PCAPCD's pollutant thresholds presented in Table 6-6, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment.

Table 6-6
PCAPCD Thresholds of Significance

Pollutant	Construction Threshold (lbs/day)	Operational/Cumulative Threshold (lbs/day)
ROG	82	55
NO_X	82	55
PM_{10}	82	82

Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.

Additionally, the PCAPCD has developed screening criteria for determining whether a project would cause substantial localized CO emissions at a given intersection. If the project would result in CO emissions from vehicle operations in excess of 550 lbs/day and either of the following conditions are met, the project could potentially result in substantial concentrations of localized CO and further analysis would be required:

- Degrade the peak hour level of service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen (i.e., increase delay by 10 seconds or more when project-generated traffic is included) an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity.[24]

However, considering that the law has changed with respect to how transportation-related impacts may be addressed under CEQA such that unacceptable LOS is no longer considered a significant impact on the environment under CEQA, this analysis relies on the 550 lbs/day of CO emissions screening criterion only.

For evaluating TAC emissions, if a project would introduce a new source of TAC or a new sensitive receptor near an existing source of TAC that would not meet the CARB's minimum recommended setback, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs. The foregoing cancer risk level and non-cancer hazard index are typically applied to individual stationary sources of TACs; however, the PCAPCD does note that the cancer risk and hazard index thresholds may also be applied to activities that are non-stationary, such as diesel delivery trucks and off-road construction equipment.

[24] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 38]. November 21, 2017.

With regard to other cumulative emissions, such as the cumulative emissions of criteria air pollutants, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a significant incremental contribution to cumulative emissions. As discussed throughout this Chapter, the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10} are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM_{10} emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the operational phase cumulative-level emissions thresholds established by PCAPCD are identical to the project-level operational emissions thresholds; the operational/cumulative thresholds are presented in Table 6-6.[25]

Greenhouse Gas Emissions

Nearly all development projects in the region have the potential to generate air pollutants that may increase global climate change. On October 13, 2016, the PCAPCD adopted GHG emissions thresholds. The thresholds were designed to analyze a project's compliance with applicable State laws including AB 32 and SB 32.[26] As discussed in the PCAPCD's Justification Report for the thresholds, the PCAPCD relied on a review of historical CEQA projects within the County during the 13-year period from 2003 to 2015. The PCAPCD modeled emissions from 688 approved projects for the model year 2020, and used the modeled emissions to determine a reasonable level to establish emissions thresholds. The PCAPCD found that with a threshold of 10,000 MT CO_2e/yr, 11 percent of projects would exceed the threshold, and those projects contribute approximately 82 percent of total GHG emissions of the 688 projects built-out. In addition to modeling past projects within Placer County, the PCAPCD modeled a range of potential future residential and commercial projects to provide additional County-specific evidence in developing the PCAPCD's thresholds.[27]

The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold.

The bright-line threshold of 10,000 MTCO_2e/yr represents the level at which a project's GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 MTCO_2e/yr for analysis of construction-related GHG emissions for land use projects. Any project with GHG emissions below the screening level threshold of 1,100 MTCO_2e/yr is considered by the PCAPCD as having a less-than-significant impact related to GHG emissions, and would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 MTCO_2e/yr screening level threshold, but below the bright-line threshold of 10,000 MTCO_2e/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emission reduction goals. The GHG

[25] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 40]. November 21, 2017.
[26] Placer County Air Pollution Control District. *California Environmental Quality Act Thresholds of Significance: Justification Report*. October 2016.
[27] *Ibid.*

efficiency thresholds, which are in units of $MTCO_2e$/yr per capita or per square-foot, are presented in Table 6-7.

In accordance with CARB and PCAPCD recommendations, the County, as lead agency, uses the currently adopted PCAPCD GHG thresholds of significance presented herein. Therefore, if the proposed project results in construction GHG emissions in excess of 10,000 $MTCO_2e$/yr, and/or operational GHG emissions in excess of 1,100 $MTCO_2e$/yr and is unable to show that emissions would achieve the efficiency thresholds presented in Table 6-7, the project would be considered to result in a cumulatively considerable contribution to global climate change.

Table 6-7
PCAPCD Operational GHG Efficiency Thresholds of Significance

Residential ($MTCO_2e$/capita)		Non-Residential ($MTCO_2e$/1,000 sf)	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3

Source: ***Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.***

Method of Analysis

The analysis protocol and guidance provided by the PCAPCD's CEQA Air Quality Handbook, including screening criteria and pollutant thresholds of significance, was used to analyze the proposed project's air quality and GHG emissions impacts.

Construction Emissions

The proposed project's short-term construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. Based on applicant-provided information, construction was assumed to commence in January of 2023 and occur over an approximately 3.5-year period. Based on project-specific information, soil import and export would not be required during the grading phase.

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All modeling results are included in Appendix C to this EIR.

Operational Emissions

The proposed project's operational emissions were estimated using CalEEMod. For this analysis, the proposed project was assumed to be fully operational by 2026. The modeling performed for the proposed project included compliance with PCAPCD rules and regulations (i.e., low-VOC [volatile organic compounds] paints and low-VOC cleaning supplies), as well as with the 2019 California Building Energy Efficiency Standards Code, and the MWELO. The proposed project's compliance with such would be verified as part of the County's building permit application review process. KD Anderson & Associates provided project-specific trip generation rates and vehicle

miles traveled (VMT), which were applied to the project modeling.[28] In addition, the proposed project would include the use of propane, rather than natural gas. CalEEMod does not include the ability to model propane emissions. As such, an off-model analysis of propane emissions generated by the proposed project was conducted and included in the emissions presented below. The project-specific non-electrical energy demand estimate in British thermal units (BTUs) was derived from the CalEEMod defaults for the proposed land use, and the emission factors for the combustion of propane from the USEPA's Emission Factor Documentation for AP-42 Section 1.5 Liquefied Petroleum Gas Combustion were applied.[29]

The processing of wine includes fermentation, which produces CO_2 as a byproduct. Therefore, an off-model analysis of fermentation emissions generated by the proposed project was conducted and included in the emissions presented below, assuming an annual production of 50,000 cases of wine per year. Fermentation emission factors were derived from Grupo Arce Manufacturing Group.[30]

The results of operational emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results and off-model calculations are included in Appendix C to this EIR.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of GHG impacts is included under the Cumulative Impacts and Mitigation Measures section below.

6-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below, the impact is *less than significant*.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO_X, and PM_{10}, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

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28 KD Anderson & Associates, Inc. *Transportation Impact Analysis for Project 8 Winery, Placer County, California.* September 12, 2022.

29 U.S. Environmental Protection Agency. *Emission Factor Documentation for AP-42 Section 1.5 Liquefied Petroleum Gas Combustion.* April 1993 [updated July 2008].

30 iPoint. *Getting it Straight: Exact Carbon Emissions From One Bottle of Wine*. Available at: https://www.ipoint-systems.com/blog/getting-it-straight-exact-carbon-emissions-from-one-bottle-of-wine/. Accessed September 2022.

Estimated unmitigated construction-related emissions associated with the proposed project are presented in Table 6-8. As shown in the table, the project's maximum construction-related emissions would be below the applicable PCAPCD thresholds of significance for ROG, NO_X, and PM_{10}.

Table 6-8
Maximum Unmitigated Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Construction Emissions	3.52	27.57	21.15
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Sources: CalEEMod, July 2022 (see Appendix C).

It should be noted that construction activity related to implementation of the proposed project would be subject to PCAPCD Rule 228. Rule 228 requires projects involving earth-disturbing activities to implement various dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Furthermore, standard Placer County conditions of approval for proposed projects within the County include various requirements that would result in additional reductions of emissions related to implementation of the proposed project from what has been estimated and presented above in Table 6-8. The County's standard conditions of approval are listed below:

- The applicant shall submit a Dust Control Plan to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via a fill-in form: http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- With submittal of the Dust Control Plan, the contractor shall submit to the APCD a comprehensive equipment inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used in aggregate of 40 or more hours. If any new equipment is added after submission of the inventory, the contractor shall notify the APCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the APCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.
- With submittal of the equipment inventory, the contractor shall provide a written calculation to the APCD for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average of 20 percent NO_X reduction and 45 percent particulate reduction comparing with the statewide fleet averages. Acceptable options for reducing emissions may include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The following link shall be used to calculate compliance with this condition and shall be submitted to the APCD as described above: http://www.airquality.org/businesses/ceqa-land-use-

planning/mitigation (click on the current "Construction Mitigation Tool" spreadsheet under Step 1).

Moreover, the County's standard conditions of approval require grading plans for the proposed project to include the following notes:

- Prior to construction activity, a Dust Control Plan or Asbestos Dust Mitigation Plan shall be submitted to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via the fill-in form: http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- Construction equipment exhaust emissions shall not exceed the APCD Rule 202 Visible Emissions limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified by the APCD to cease operations, and the equipment must be repaired within 72 hours.
- Dry mechanical sweeping is prohibited. Watering of a construction site shall be carried out to mitigate visible emissions. (Based on APCD Rule 228 / Section 301)
- The contractor shall not discharge into the atmosphere volatile organic compounds caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance unless such manufacture or use complies with the provisions of Rule 217 Cutback and Emulsified Asphalt Paving Materials.
- The contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.
- During construction, open burning of removed vegetation is only allowed under APCD Rule 304 Land Development Smoke Management. A Placer County Air Pollution Control District permit could be issued for land development burning, if the vegetation removed is for residential development purposes from the property of a single or two family dwelling or when the applicant has provided a demonstration as pursuant to Section 400 of the Rule that there is no practical alternative to burning and that the Air Pollution Control Officer (APCO) has determined that the demonstration has been made. The APCO may weigh the relative impacts of burning on air quality in requiring a more persuasive demonstration for more densely populated regions for a large proposed burn versus a smaller one. In some cases, all of the removed vegetative material shall be either chipped on site or taken to an appropriate recycling site, or if a site is not available, a licensed disposal site. (Based on APCD Rule 304)[31]
- The contractor shall minimize idling time to a maximum of five minutes for all diesel-powered equipment. (Placer County Code Chapter 10, Article 10.14)
- Idling of construction-related equipment and construction-related vehicles shall be minimized within 1,000 feet of any sensitive receptor (i.e., house, hospital, or school).
- The contractor shall suspend all grading operations when fugitive dust exceeds the APCD Rule 228 (Fugitive Dust) limitations. Fugitive dust is not to exceed 40

[31] As described in Chapter 18, Wildfire, of this EIR, and required by Mitigation Measure 18-2, prescribed burning/open burning of removed vegetation shall be probihited. Nonetheless, this standard condition of approval would be noted on project grading plans.

percent opacity, nor go beyond the property boundary at any time. Lime or other drying agents utilized to dry out wet grading areas shall not exceed APCD Rule 228 limitations. (Based on APCD Rule 228 / section 302 & 401.4)

- The prime contractor shall be responsible for keeping adjacent public thoroughfares clean by keeping dust, silt, mud, dirt and debris from being released or tracked offsite. Wet broom or other methods can be deployed as control and as approved by the individual jurisdiction. (Based on APCD Rule 228 / section 401.5)
- During construction activity, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust or visible emissions from crossing the project boundary line. (Based on APCD Rule 228 / section 401.2)
- The contractor shall apply methods such as surface stabilization, the establishment of a vegetative cover, paving, (or use another method to control dust as approved by the individual jurisdiction) to minimize wind-driven dust.
- The contractor shall apply water or use methods to control dust impacts offsite. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site. (Based on APCD Rule 228 / section 304)
- The contractor shall suspend all grading operations when wind speeds (including instantaneous gusts) are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures. (Based on APCD Rule 228 / section 401.6)
- In order to minimize wind driven dust during construction, the prime contractor shall apply methods such as surface stabilization, establishment of a vegetative cover, paving (or use of another method to control dust as approved by Placer County). (Based on APCD Rule 228 / section 402)
- Any device or process that discharges 2 pounds per day or more of air contaminants into the atmosphere, as defined by Health and Safety Code Section 39013, may require an APCD permit. Developers/contractors should contact the APCD prior to construction and obtain any necessary permits prior to the issuance of a Building Permit. (APCD Rule 501)

It is noted that, while the measures listed above would reduce construction-related criteria pollutant emissions, the measures are not required in order to reduce an identified significant impact under CEQA.

Conclusion

Because the proposed project's estimated unmitigated construction emissions would be below the applicable PCAPCD thresholds of significance, construction activities associated with development of the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone or PM. Accordingly, construction of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

6-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, the impact is *less than significant*.

As discussed above, due to the nonattainment designations of the area, the PCAPCD has developed plans to attain the State and federal standards for ozone and particulate matter. The currently applicable air quality plan is the 2013 Ozone Attainment Plan. Adopted PCAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the PCAPCD's mass emission thresholds, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts.

Emissions of ROG, NO_X, and PM_{10} would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, consumer products (e.g., deodorants, detergents, hair spray, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). However, the most significant source of emissions related to the proposed project would be from mobile sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, the project-specific trip generation rates and VMT estimates prepared by KD Anderson & Associates were applied to the project modeling.

The maximum unmitigated operational emissions for the proposed project are presented in Table 6-9 below. As shown in the table, unmitigated operational emissions would be below the PCAPCD's thresholds of significance for ROG, NO_X, and PM_{10}.

Table 6-9
Maximum Unmitigated Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	3.85	17.16	2.47
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**NO**	**NO**	**NO**

Note: Project emissions include electricity-related emissions estimated using CalEEMod and propane-related emissions calculated off-model.

Source: CalEEMod, July 2022 (see Appendix C).

Accordingly, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation. Therefore, operations of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

6-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, the impact is *less than significant*.

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the AAQS are only expected where background levels are high, and traffic volumes and congestion levels are high. As noted previously, the PCAPCD has established screening methodology for localized CO emissions. According to the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions, then a potentially significant adverse health impact related to localized CO emissions could occur. According to the modeling performed for the proposed project, operation of the project would result in maximum unmitigated mobile source CO emissions of 7.57 lbs/day (see Appendix C). Consequently, CO emissions related to mobile sources associated with operation of the proposed project would be below the 550 lbs/day screening threshold used by PCAPCD. Therefore, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS, and the proposed project would not expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

As stated above, if a project would introduce a new source of TACs, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs. Activities related to the construction and operation of the proposed project are considered herein to determine whether the proposed project would expose nearby sensitive receptors to substantial TAC emissions. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

The nearest existing sensitive receptors to the project site are the rural residences surrounding the site, with the closest located approximately 150 feet to the south.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. The construction period would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated

with the proposed project were estimated to occur over an approximately 3.5-year period. Only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. As discussed above, through standard conditions of approval, Placer County requires off-road equipment used within the County to achieve lower than State-average emissions of NO_X and PM. Thus, on-site emissions of PM would be reduced, which would result in a proportional reduction in DPM emissions and exposure of nearby residences to DPM. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, including Rule 501 related to General Permit Requirements. In addition, the prevailing wind direction in the project area is most often from the south.[32] As a result, construction-related emissions would primarily flow towards the north, away from the nearest receptor.

Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the duration of construction activities in comparison to the operational lifetime of the project, the typical long-term exposure periods associated with conducting health risk assessments, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

As discussed above, the proposed project's construction-related emissions would be below the applicable mass emissions thresholds of significance for PM_{10}, which includes DPM and fugitive dust related to construction. The PCAPCD's Handbook advises that if construction-related emissions have been quantified and are below the thresholds of significance, the project would result in a less-than-significant impact.[33] Considering that PM_{10} emissions, which include emissions of DPM, would be below the PCAPCD's thresholds of significance, construction of the proposed project would not be expected to generate substantial DPM emissions such that an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 would occur.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. For example, during the harvest period, an average of 2.5 haul truck deliveries are expected per week, with a maximum occurrence of two truck deliveries per day.[34] The proposed winery is not anticipated to involve the long-term or frequent operations of any stationary diesel engines. As a result, operations of the proposed project are not anticipated to result in the exposure of sensitive receptors to substantial concentrations of DPM.

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32 Weather Spark. *Average Weather in Auburn California, United States*. Available at: https://weatherspark.com/y/1112/Average-Weather-in-Auburn-California-United-States-Year-Round. Accessed July 2022.

33 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 31 and 32]. November 21, 2017.

34 KD Anderson & Associates, Inc. *Transportation Impact Analysis for Project 8 Winery, Placer County, California.* September 12, 2022.

Naturally Occurring Asbestos

According to the Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California, prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[35] Consequently, NOA is not anticipated to be present on the project site.

Criteria Pollutants

As noted in Table 6-1, exposure to criteria air pollutants can result in adverse health effects. The AAQS presented in Table 6-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SVAB is designated as nonattainment for State and federal eight-hour ozone and State PM_{10} standards, the PCAPCD, along with other air districts in the SVAB region, has adopted federal and state attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SVAB are not exposed to excess concentrations of criteria pollutants. The PCAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS.[36] Thus, if a project's criteria pollutant emissions exceed the PCAPCD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

However, as discussed in Impacts 6-1 and 6-2, the proposed project would not result in emissions that exceed the PCAPCD's thresholds of significance. Consequently, implementation of the proposed project would not conflict with the PCAPCD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

Conclusion

Based on the above analysis, the proposed land uses would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and a ***less-than-significant*** impact would occur.

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35 Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

36 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 20]. November 21, 2017.

Mitigation Measure(s)
None required.

6-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, visible emission (including dust), or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 6-1 through 6-3 above. Therefore, the following discussion focuses on emissions of odors and visible emissions.

Odors
Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact are difficult. Certain land uses such as wastewater treatment and conveyance facilities, landfills, and confined animal facilities have the potential to generate considerable odors. Operations of the proposed project would not introduce any such activities.

Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary, and operation of equipment is regulated by federal, State, and local standards, including PCAPCD rules and regulations. Buildout of the proposed project would involve construction activity in different areas of the site and within off-site improvement areas throughout the construction period. Therefore, construction equipment would operate at varying distances from existing sensitive receptors, and potential odors from such equipment would not expose any single receptor to odors for a substantial period of time. Furthermore, construction activity would be restricted to certain hours of the day pursuant to the Placer County Code, Section 9.36.030(A)(7), which would limit the times of day during which construction related odors would potentially be emitted. Development of the proposed project would be required to comply with all applicable PCAPCD rules and regulations, which would help to control construction-related odorous emissions. Due to the temporary duration of construction and the regulated nature of construction equipment, project-related construction activity would not be anticipated to result in the creation of substantial odors.

Operations of the proposed accessory restaurant would have the potential to result in emissions of odors related to food preparation and disposal. However, the design of the commercial cooking area would be required to comply with all State and local regulations associated with cooking equipment and controls, such as grease filtration and removal systems, exhaust hood systems, and blowers to move air into the hood systems and through air cleaning equipment. Such equipment would ensure that pollutants or odors associated with smoke and exhaust from cooking surfaces would be captured and filtered, allowing only filtered air to be released into the atmosphere. The disposal of solid waste, including putrescible waste, such as food waste, is regulated under Article 8.16 of Placer County's Code of Ordinances. Article 8.16 prohibits waste storage practices that would create unpleasant odors, and requires putrescible waste to be kept within proper designed

and maintained containers that include lids to control odiferous emissions. Installation of cooking area ventilation and exhaust, as well as storage of food waste in compliance with Article 8.16 of Placer County's Code of Ordinances, would reduce the potential for the proposed project to result in the emission of substantial odiferous emissions.

In addition, wine processing and manufacturing has the potential to create odors. However, given the distance to the nearest sensitive receptor, and because the prevailing wind direction is most often from the south, away from the nearest receptor, impacts related to odors from wine processing are not anticipated to occur.

Furthermore, PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, including odors, and provides enforcement of odor control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, if odor or air quality complaints are made upon development of the proposed project, the PCAPCD would be required (see PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

Considering the above, operations and construction of the proposed project are unlikely to result in the creation of substantial odors.

Visible Emissions

As defined in PCAPCD Rule 202, visible emissions may be smoke, dust, or any other substance that obscures an observer's view based on standardized scales of opacity. Visible emissions may result from the use of internal combustion engines, such as smoke from diesel fueled equipment, the burning of vegetation, or the upset and release of soil as dust.

PCAPCD Rule 202 specifically prohibits any person from discharging visible emissions of any air contaminant for a period or periods aggregating to more than three minutes in any one-hour time. Operation of the proposed land uses would not be anticipated to result in any visible emissions that would have the potential of violating Rule 202. Construction equipment on-site would be required to meet the visible emissions standards of Rule 202, and, considering the regulated nature of construction equipment, as well as the temporary use of such equipment on-site, would not be anticipated to result in substantial visible emissions.

Additionally, PCAPCD Rule 228 requires implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions.

Considering the above, implementation of the proposed project would not be anticipated to result in substantial visible emissions during project construction or operations.

Conclusion

For the aforementioned reasons, project construction and operations would not result in emissions of other pollutants (such as those leading to odors) that could adversely affect a substantial number of people. Accordingly, implementation of the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes Placer County and surrounding areas within the portion of the SVAB that is designated nonattainment for ozone and PM_{10}.

As mentioned above, global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts).

A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

6-5 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The proposed project is within a nonattainment area for ozone and PM_{10}. By nature, air pollution is largely a cumulative impact. The population growth and vehicle usage within the nonattainment area from the proposed project, in combination with other past, present, and reasonably foreseeable projects within Placer County and surrounding areas,

contributes to the region's adverse air quality impacts on a cumulative basis, and could either delay attainment of AAQS or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project's emissions of criteria air pollutants would contribute to cumulative regional air quality effects.

As noted in the Standards of Significance section above, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. A project's interference with such plans may be determined through the use of the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10}. The PCAPCD's recommended cumulative thresholds are identical to the operational thresholds, both of which are presented in Table 6-6. Accordingly, if the proposed project would result in an increase of ROG, NO_X or PM_{10} in excess of PCAPCD's operational phase cumulative-level emissions threshold, which are identical to PCAPCD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts.

As discussed under Impact 6-2, and demonstrated in Table 6-9, operational criteria pollutant emissions associated with the proposed project would be below the applicable PCAPCD thresholds of significance. Therefore, implementation of the proposed project would not result in a significant incremental contribution to a cumulative violation of any air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with and/or obstruct implementation of the PCAPCD's air quality planning efforts. As such, the proposed project's incremental contribution to regional air quality impacts would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

6-6 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operation.

Construction GHG Emissions

The estimated unmitigated maximum annual construction-related GHG emissions from the proposed project are presented in Table 6-10. As presented therein, the maximum annual construction-related GHG emissions would be well below the PCAPCD's bright-line threshold of 10,000 $MTCO_2e$/yr.

Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of the proposed project are discussed in the Method of Analysis section above. The estimated unmitigated operational GHG emissions at full buildout (2026) are presented in Table 6-11.

Table 6-10
Unmitigated Maximum Annual Construction GHG Emissions

	GHG Emissions ($MTCO_2e$/yr)
Annual Construction GHG Emissions	608.10
PCAPCD Significance Threshold	**10,000**
Exceeds Threshold?	**NO**

Sources: CalEEMod, July 2022 (see Appendix C).

Table 6-11
Unmitigated Project Operational GHG Emissions

Emission Source	**GHG Emissions ($MTCO_2e$/yr)**
Area	0.0034
Energy[1]	830.13
Mobile	282.64
Offroad	331.48
Solid Waste	36.91
Water	46.08
Fermentation[2]	133.50
Total Annual Operational GHG Emissions[3]	*1,660.74*
PCAPCD Screening Level Threshold	**1,100**
PCAPCD Bright Line Threshold	**10,000**

1 Energy emissions represent the sum of electricity-related emissions estimated using CalEEMod and propane-related emissions calculated off-model.
2 Wine processing and fermentation emissions calcuated off-model.
3 Rounding may result in small differences in summation.

Source: CalEEMod, July 2022 (see Appendix C).

As presented in Table 6-11, the proposed project would result in operational GHG emissions that exceed the PCAPCD's Screening Level Threshold. However, the project's operational GHG emissions would be below the PCACPD's Bright Line Threshold of 10,000 $MTCO_2e$/yr. Therefore, the project has been further evaluated in comparison with the efficiency thresholds presented in Table 6-7.

The efficiency thresholds rely on $MTCO_2e$ emissions per year per 1,000 square feet (ksf) of building area to determine significance for non-residential projects in rural or urban settings. In general, urban projects are considered to involve shorter vehicle trips, which would inherently reduce GHG emissions from mobile sources, while rural projects are considered to involve relatively longer vehicle trips and proportionally higher GHG emissions from mobile sources. The PCAPCD directs lead agencies to determine whether a project is considered rural or urban. The proposed project is located within a generally rural portion of Placer County and, as a result, the PCAPCD's rural efficiency threshold is used for further analysis of project-related operational emissions. The estimated emissions per ksf for the proposed project are presented below in Table 6-12 and compared with the applicable PCAPCD efficiency threshold.

Table 6-12
Unmitigated Project Operational GHG Emissions Per 1,000 sf

Project Emissions ($MTCO_2e$/yr/1,000 sf)	PCAPCD Efficiency Threshold for Rural Non-Residential Projects ($MTCO_2e$/yr/1,000 sf)
20.65	27.3
Note: 1,660.74 $MTCO_2e$/yr / 80.430 ksf = 20.65 $MTCO_2e$/yr/ksf	

As shown in the table, the proposed project would result in operational GHG emissions below the applicable PCAPCD efficiency threshold. Therefore, operation of the proposed project would not be considered to generate GHG emissions that may have a significant impact on the environment.

It is noted that even if the project emissions were compared to the more stringent efficiency threshold for *urban* non-residential projects (26.5 $MTCO_2e$/yr/ksf), the impact would remain less than significant.

Consistency with Placer County Sustainability Plan

The CARB encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State's commitment to reducing GHG emissions. As noted previously, Placer County adopted the PCSP on January 28, 2020.[37] The PCSP includes an inventory of baseline emissions from the year 2005 and forecasted emissions in 2020, 2030, and 2050. In addition, the PCSP establishes a target of reducing GHG emissions from Placer County to 15 percent below 2005 levels by 2020 and achieving the State-wide per capita efficiency target of six $MTCO_2e$ per person by 2030. The GHG reductions presented within the PCSP are designed to achieve the State's adopted AB 32 and SB 32 reduction targets. The PCSP contains community-wide and municipal GHG mitigation strategies that can be applied to discretionary projects, as feasible, when the applicable project-level GHG thresholds are exceeded. Under the PCSP, the County utilizes the PCAPCD recommended GHG thresholds to determine whether PCSP emission reduction measures are required. Because the proposed project's operational GHG emissions would be below the applicable thresholds (see Table 6-11 and Table 6-12), implementation of the GHG reduction measures included in the PCSP is not required. Therefore, the proposed project would not conflict with implementation of the PCSP.

Conclusion

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***less than cumulatively considerable***.

[37] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

Mitigation Measure(s)

None required.

7. Biological Resources

7. BIOLOGICAL RESOURCES

7.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the project site and surrounding environs. The chapter describes the proposed project's potential impacts to biological resources and identifies measures to eliminate or substantially reduce impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project region. The information contained in the analysis is primarily based on a Biological Resources Assessment (BRA) and Aquatic Resources Delineation Report (ARD) prepared by Madrone Ecological Consulting (Madrone) (see Appendices D and E of this EIR).[1,2] In addition, an Oak Resources Technical Report (Arborist Report) was prepared by California Tree and Landscape Consulting, Inc. (Cal TLC) (see Appendix F of this EIR).[3] Further information was sourced from the Placer County General Plan,[4] the Placer County General Plan EIR,[5] the Horseshoe Bar/Penryn Community Plan (HBPCP),[6] and the Placer County Conservation Program (PCCP).[7]

7.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the existing environmental setting and biological resources occurring in the proposed project region.

Regional Setting

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County, in north-central California. A portion of the project site is within the northwest HBPCP area. The County has a Mediterranean climate and consists of a mosaic of oak woodland and savanna, mixed evergreen and pine forests, grasslands, chaparral, wetland communities, and riparian scrub and forest communities. The project vicinity is characterized by nearly flat and gently rolling terrain. The landscape is predominantly rural and supports agricultural fields intermixed with large areas of natural vegetation. The region's most prevalent and sensitive vegetative resources include oak woodlands, riparian and stream habitats, and wetlands. The dominant oak communities in the region consist of blue oak woodlands, interior oak woodlands, and valley oak savannas. Riparian communities commonly occur along perennial (permanent) and seasonal streams, ponds, and swales in the region, with the predominant two types of riparian communities being mixed riparian woodland and willow scrub. The most diverse and well-established riparian communities occur along Antelope Creek, Secret Ravine, Miner's Ravine, Mormon Ravine, and several tributaries of the aforementioned streams. Wetlands are

1 Madrone Ecological Consulting. *Biological Resources Assessment, 7615 Callison Road, Placer County, California*. September 26, 2022.
2 Madrone Ecological Consulting. *Aquatic Resources Delineation Report, 7615 Callison Road Property, Placer County, California*. April 19, 2021.
3 California Tree and Landscape Consulting, Inc. *Oak Resources Technical Report.* April 14, 2021.
4 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
5 Placer County. *Countywide General Plan EIR*. July 1994.
6 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
7 Placer County. *Placer County Conservation Program*. February 2020.

primarily located in low-lying land in the region and typically include cattail marsh, pond, wet meadow, seasonal swale, and seasonal drainage. Typical wetland vegetation species include cattail, spike rush, rush, sedge, pond weed, curly dock, watercress, monkeyflower, and common speedwell.

The region is situated in the transitional zone between the higher elevation Sierra Nevada and the lowlands of the Central Valley. The region's location is within the range of several species common to either bioregion. At lower elevations, the County is characterized by annual grasslands, intermittent streams, and riparian vegetation. At higher elevations, oak woodland, mixed evergreen forest, scrub and chaparral, and riparian vegetation dominate. For many years, the principal land uses of the region were cattle grazing, mining, logging, and farming. Such land uses are still prevalent in the County, but they are being replaced with residential, commercial, and industrial land uses.

Project Setting

The "Study Area" for the proposed project consists of the approximately 18-acre project site and is depicted in Figure 7-1, within the surrounding 44.14-acre parcel area.[8] The project site is generally bounded to the south by Union Pacific Railroad (UPRR) right-of-way (ROW) and Callison Road, and to the north by UPRR ROW. Rural large ranchette residential lots and ruderal grassland border the site to the east and west. Access to the site is provided by way of Callison Road to the south, from which an unnamed paved road extends north into the site. The central to southern portions of the project site primarily consist of barren areas that have been recently graded. Portions of the site's southern end are completely unvegetated, while other areas consist of sparse to robust patches of ruderal grasses and forbs that are regularly maintained. The northern portion of the project site consists of a hill that generally slopes downward towards the south. Annual brome grassland is located along the lower slopes of the hill. The vegetation within the grassland is generally robust and dominated by annual grasses and forbs. The portions of the hill at higher elevations feature oak woodland dominated by blue oak (*Quercus douglasii*). Small patches of oak woodland and nonnative ornamental trees are also located along Callison Road, which runs along the southern property line. Several unvegetated dirt roads are interspersed throughout the site, and a small group of cattle graze the northern portion of the site, within the blue oak woodland.

A segment of the Antelope Canal extends through the northern portion of the site along the slope of the on-site hill, and is approximately seven feet wide, generally bisecting the blue oak woodland to the north and annual grassland and barren habitat to the south. The canal is a uniform, concrete-lined channel completely devoid of vegetation. Water within the canal flows to the northwest through the site and crosses under the UPRR ROW to the north. It should be noted that separate from the project and prior to project construction, PCWA will encase a portion of Antelope Canal that is located on-site with a 48-inch high-density polyethylene (HDPE) pipe. Canal encasement would include concrete inflow and outflow structures with trash/safety racks. Encasement of the canal would help ensure that project runoff would not enter the canal. In addition, a small roadside drainage ditch is located to the south of Callison Road, and a manmade pond is located west of the project site, within the surrounding parcel area.

[8] The project site, as defined in the Project Description chapter of this EIR, is 17.96 acres; however, the site, as evaluated in the BRA, is 18.2 acres, which provides a more conservative analysis due to the slightly larger area of analysis. The parcel area, as defined in the Project Description chapter of this EIR, is 44.14 acres. The BRA defines the parcel area as 43.09 acres. The slight reduction in parcel area acreage does not affect the analysis of potential impacts to biological resources, as the project components would be implemented within the approximately 18-acre project site.

Figure 7-1
Project 8 Winery Project Site/Study Area



Source: Madrone Ecological Consulting, 2022.

Overall, the project site features rolling topography that gently slopes downward from east to west. On-site elevation ranges from approximately 725 feet above mean sea level (msl) at the southwest corner to 930 feet above msl at the top of the hill in the northeast portion.

Terrestrial Plant Communities

Madrone identified six habitat types within the project site, including barren, blue oak woodland, annual brome grassland, interior live oak woodland, urban woodland, and mixed oak woodland. The terrestrial land cover types in the project site are summarized in Table 7-1, shown in Figure 7-2, and discussed further below.

Table 7-1
Terrestrial Land Cover Types Mapped Within Project Site

Land Cover	Acreage
Barren	9.2
Blue Oak Woodland	6.1
Annual Brome Grassland	2.6
Interior Live Oak Woodland	<0.1
Urban Woodland	<0.1
Mixed Oak Woodland	0.1
Total	**18.1**

Source: Madrone Ecological Consulting, 2022.

Barren

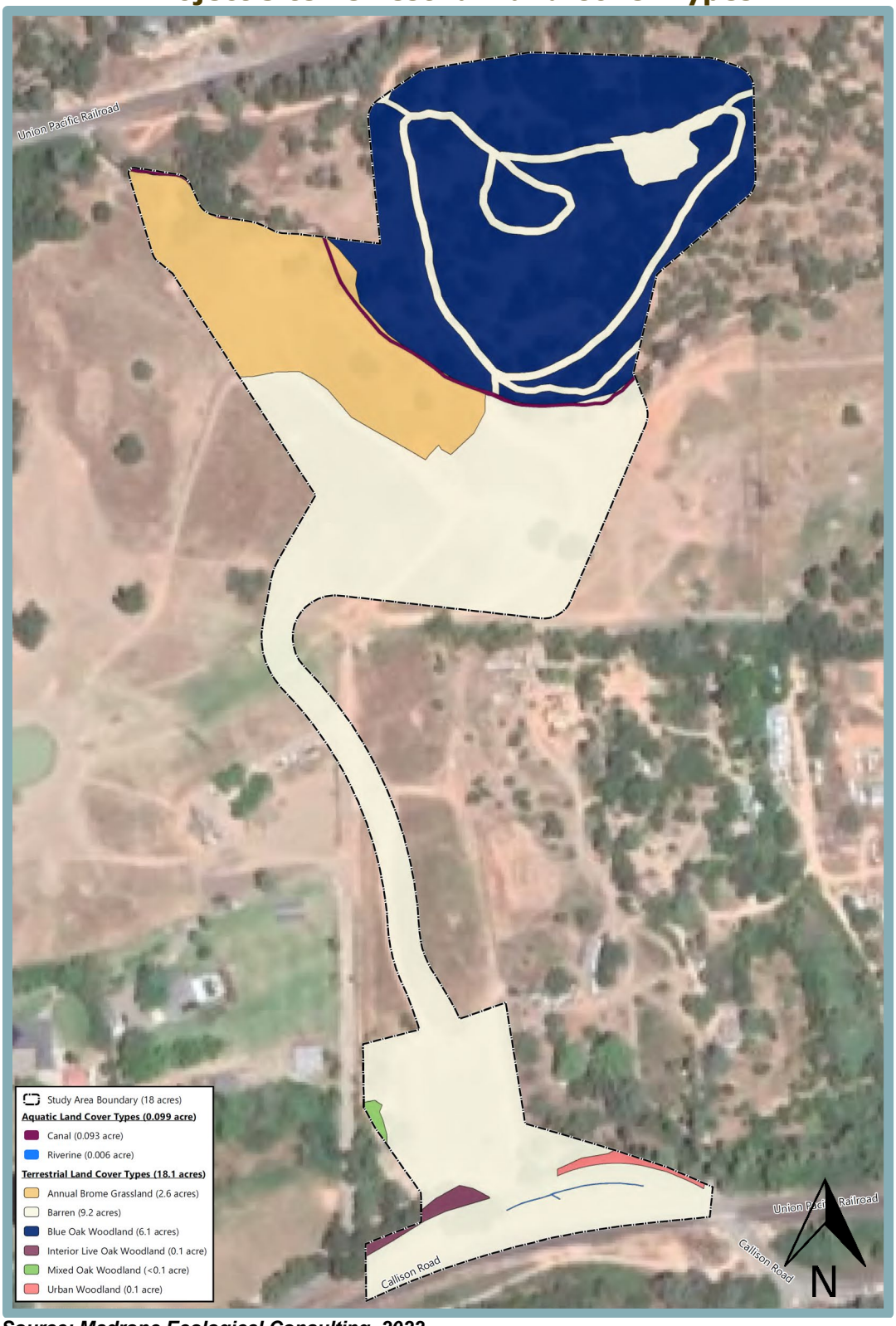
The most abundant land cover type within the project site is barren, which is present throughout much of the site, from approximately the middle portion of the property to the southern end of the site. Where present, vegetation consists of ruderal grasses and forbs such as tumble mustard (*Hirschfeldia incana*), stinkwort (*Dittrichia graveolens*), yellow star-thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), skeleton weed (*Chondrilla juncea*), hedgehog grass (*Cynosurus echinatus*), rose clover (*Trifolium hirtum*), moth mullein (*Verbascum blattaria*), woolly mullein (*Verbascum thapsus*), yellow devil's claw (*Proboscidea lutea*), spiny cockleburr (*Xanthium spinosum*), manyflower tobacco (*Nicotiana acuminata*), Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Festuca perennis*), and wild oat (*Avena fatua*).

The mesic portion of the barren areas include more facultative-dominant species, such as Muehlenberg's centaury (*Zeltnera muehlenbergii*), curly dock (*Rumex crispus*), bird's foot trefoil (*Lotus corniculatus*), English plantain (*Plantago lanceolata*), white clover (*Trifolium repens*), poison hemlock (*Conium maculatum*), and pennyroyal (*Mentha pulegium*). The barren land cover type also includes portions of Callison Road, a paved public road along the southern boundary. In addition, several small dirt and gravel roads are interspersed throughout the site, within the barren and blue oak woodland land cover types.

Blue Oak Woodland

Blue oak woodland occurs within the northeast portion of the project site, along the hill's more elevated area. Blue oak trees dominate the tree stratum. Other common tree species within the community include interior live oak (*Quercus wislizeni*), black oak (*Quercus kelloggii*), California buckeye (*Aesculus californica*), and grey pine (*Pinus sabiniana*).

Figure 7-2
Project Site Terrestrial Land Cover Types



Source: Madrone Ecological Consulting, 2022.

The understory, in general, is sparsely vegetated and dominated by soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), hedgehog grass, wild oat, and rose clover. Additional species within the understory include tall sock-destroyer (*Torilis arvensis*), Italian thistle (*Carduus pycnocephalus*), California pipevine (*Aristolochia californica*), California brome grass (*Bromus carinatus*), blue dicks (*Dichelostemma capitatum*), and purple needle grass (*Stipa pulchra*).

Annual Brome Grassland

Annual brome grassland is located within the northwest portion of the project site, along the lower slopes of the hill. The grassland is composed of a similar suite of species as the blue oak woodland understory and is dominated by upland annual grasses and forbs, such as soft chess, ripgut brome, hedgehog grass, wild oat, and rose clover. Some ruderal vegetation occurs within the community as well, such as fennel (*Foeniculum vulgare*) and yellow star-thistle.

Interior Live Oak Woodland

The live oak woodland community is located along Callison Road in the project site's southern portion. The community is dominated by interior live oak, with an understory of toyon (*Heteromeles arbutifolia*) and some annual grasses and forbs.

Urban Woodland

Nonnative ornamental trees occur along Callison Road at the project site's southeast corner. Tree species within the community include deodar cedar (*Cedrus deodara*), blue gum (*Eucalyptus globulus*), and coast redwood (*Sequoia sempervirens*).

Mixed Oak Woodland

The mixed oak woodland community occurs at the project site's southwest boundary. Tree cover includes valley oak (*Quercus lobata*), incense cedar (*Calocedrus decurrens*), Goodding's black willow, and interior live oak. The understory consists of sandbar willow (*Salix exigua*), coyote brush (*Baccharis pilularis*), Himalayan blackberry, and toyon, as well as several annual grasses and forbs.

Aquatic Resources

Madrone conducted a protocol-level ARD of the project site on June 30 and July 1, 2020. Further details on the methodology used as part of the delineation are provided in the Method of Analysis subsection below. The aquatic resources mapped within the project site, canal and riverine, are shown in Figure 7-2. Table 7-2 below summarizes the acreages of aquatic resources located within the parcel area, which is followed by further discussions on each resource.

Table 7-2
Aquatic Resources Mapped Within Project Site

Aquatic Resource Type	Acreage
Antelope Canal	0.093
Riverine (Roadside Ditch)	0.006
Total	**0.099**

Source: Madrone Ecological Consulting, 2022.

Antelope Canal

As previously discussed, the Antelope Canal runs within the project site's northern portion, along the slope of the hill. The canal is a perennial, constructed ditch and tributary to Antelope Creek. Water within the canal flows towards the northwest through the site before crossing under the UPRR ROW to the north. The Antelope Canal is a manmade, concrete-lined feature that conveys irrigation water from several sources, including the Yuba River, Bear River, and the American River, to properties in Penryn, Loomis, and unincorporated portions of western Placer County.

The segment of the Antelope Canal that flows through the project site is expected to be encased by PCWA prior to commencement of construction activities associated with the proposed project.

Riverine (Roadside Ditch)

The small roadside ditch within the southern portion of the project site is an unvegetated, shallow dirt feature that conveys ephemeral stormwater runoff from Callison Road. Water within the ditch drains a short distance to the southwest into a culvert. The roadside ditch was created in uplands to drain upland runoff, receives ephemeral flows, and is not a relocated tributary.

Special-Status Species

Special-status species are species that have been listed as threatened or endangered under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered to have special status due to declining populations, vulnerability to habitat change, or restricted distributions. A description of the criteria and laws pertaining to special-status classifications is provided below. Special-status plant species may meet one or more of the following criteria:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 Code of Federal Regulations [CFR] Section 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (64 CFR 205, October 25, 1999; 57533-57547);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5);
- Plants that meet the definitions of rare or endangered species under CEQA (CEQA Guidelines Section 15380); and/or
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (CNPS California Rare Plant Rank [CRPR] Lists 1A, 1B, 2A, 2B, and 3 [2001]).

All plants appearing on CRPR Lists 1 and 2 are considered to meet CEQA Guidelines Section 15380 criteria. CRPR List 3 plants are those for which more information is needed – a review list. According to CNPS, CRPR 4 taxa do not clearly meet CEQA standards and thresholds for impact considerations.[9] Nevertheless, some level of CEQA review is justified for CRPR 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be

[9] California Native Plant Society. *Technical Memorandum: Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis.* Adopted January 21, 2020.

shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document.

Special-status wildlife species may meet one or more of the following criteria:

- Wildlife listed as threatened or endangered, or proposed as candidates for listing by the United State Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) under the FESA (50 CFR 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5);
- Wildlife that meets the definitions of rare or endangered species under CEQA Guidelines Section 15380;
- Wildlife Species of Special Concern to the California Department of Fish and Wildlife (CDFW);
- Wildlife species that are fully protected in California (California Fish and Game Code [CFGC], Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and/or
- Covered species under the PCCP.

Several species of plants and animals within California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the State's human population grows and the habitats such species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under State and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "Species of Special Concern" by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered. Collectively, the aforementioned plants and animals are referred to as "special-status species."

Listed and Special-Status Plant Species

According to the records search conducted as part of the BRA, 24 special-status plant species have the potential to occur in the vicinity of the parcel area. Based on protocol-level special-status plant surveys and literature review (detailed further in this chapter under the Method of Analysis subsection), none of the plant species were determined to have potential to occur within the project site. Further details on each of the plant species is provided in Table 7-3.

Listed and Special-Status Wildlife Species

According to the records search conducted as part of the BRA, 26 special-status wildlife species have the potential to occur within the vicinity of the parcel area (see Table 7-3). Based on field observations and literature review (detailed further in this chapter under the Method of Analysis subsection), three of the 26 special-status wildlife species were determined to have the potential to occur on-site. The following set of criteria was used to determine the potential for special-status plant and wildlife species to occur within the study area:

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Plants				
Allium jepsonii Jepson's onion	--	CRPR 1B.2	Occurs in serpentine or volcanic soils within chaparral, cismontane woodland, or lower montane coniferous forest.	**Habitat Not Present**. Serpentine or volcanic soils are not located within the project site.
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	**Absent**. Marginally suitable habitat is present in the blue oak woodland and annual brome grassland. The species was not observed during the 2021 protocol surveys.
Calystegia stebbinsii Stebbin's morning-glory	FE	CE, CRPR 1B.1	Occurs in gabberonic or serpentine soils within chaparral openings or cismontane woodland.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Carex xerophila Chaparral sedge	--	CRPR 1B.2	Occurs in chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Ceanothus roderrickii Pine Hill ceanothus	FE	CR, CRPR 1B.1	Occurs in chaparral or cismontane woodland within gabberonic soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Chlorogalum grandiflorum Red Hills soaproot	--	CRPR 1B.2	Occurs in chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded, saline-alkali soils at elevations below 500 feet.	**Habitat Not Present**. Saline-alkali soils are not present within the project site.
Clarkia biloba ssp. *brandegeeae* Brandegee's clarkia	--	CRPR 4.2	Occurs in foothill woodland, yellow pine forest, and chaparral.	**Absent**. Marginally suitable habitat is present in the blue oak woodland. The species was not observed during the 2021 protocol surveys.
Crocanthemum suffrutescens Bisbee Peak rush-rose	--	CRPR 3.2	Prefers chaparral and often occurs in burned or disturbed areas on gabberonic or lone soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.

(Continues on next page)

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	Occurs in vernal pools and other depressional wetlands.	**Habitat Not Present**. Vernal pools or depressional wetlands are not present within the project site.
Fritillaria eastwoodiae Butte County fritillary	--	CRPR 3.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Fremontodendron decumbens Pine Hill flannelbush	FE	CR, CRPR 1B.2	Occurs in chaparral or cismontane woodland within rocky serpentine or gabberonic soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Galium californicum ssp. *sierrae* El Dorado bedstraw	FE	CR, CRPR 1B.2	Occurs in chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Gratiola heterosepala Bogg's Lake hedge-hyssop	--	CE, CRPR 1B.2	Occurs in vernal pools and along the margins of lakes/ponds.	**Habitat Not Present**. Vernal pools, lakes, or ponds are not present within the project site.
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--	CRPR 1B.2	Occurs along the edges of vernal pools and other seasonally ponded features.	**Habitat Not Present**. Vernal pools or depressional wetlands are not present within the project site.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--	CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100 feet and 4,100 feet elevation.	**Habitat Not Present**. Vernal pools, mesic areas, meadows, seeps, or depressional wetlands are not present within the project site.
Lasthyrus sulphureus var. *argillaceus* Dubious pea	--	CRPR 3	Occurs in cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest.	**Habitat Not Present**. Cismontane woodland or coniferous forests are not located within the project site.
Legenere limosa Legenere	--	CRPR 1B.1	Occurs in vernal pools.	**Habitat Not Present**. Vernal pools are not present within the project site.
Navarretia myersii ssp. *myersii* Pincushion navarretia	--	CRPR 1B.1	Occurs in vernal pools.	**Habitat Not Present**. Vernal pools are not present within the project site.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Orcuttia viscida Sacramento Orcutt grass	FE	CE, CRPR 1B.1	Occurs in vernal pools.	**Habitat Not Present**. Vernal pools are not present within the project site. Additionally, the site is outside of the known range of the species.
Packera layneae Layne's ragwort	FT	CR, CRPR 1B.2	Occurs in chaparral or cismontane woodland within rocky serpentine or gabberonic soils.	**Habitat Not Present**. Serpentine or gabberonic soils are not located within the project site.
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	Occurs in emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	**Habitat Not Present**. The Antelope Canal and roadside ditches within the project site do not contain suitable habitat for the species.
Viburnum ellipticum Oval-leaved viburnum	--	CRPR 2B.3	Occurs in chaparral, cismontane woodland, or lower montane coniferous forests.	**Habitat Not Present**. Chaparral, cismontane woodland, or lower montane coniferous forests are not present within the project site.
Wyethia reticulata El Dorado County mule ears	--	CRPR 1B.2	Occurs in clay or gabberonic soils within chaparral, cismontane woodland, or lower montane coniferous forests.	**Habitat Not Present**. Gabberonic clay soils are not present within the project site.
Invertebrates				
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Occurs in vernal pools and other depressional wetlands.	**Habitat Not Present**. Vernal pools or appropriate depressional wetlands are not present within the project site.
Branchinecta conservation Conservancy fairy shrimp	FE	--	Occurs in vernal pools and other depressional wetlands.	**Habitat Not Present**. Vernal pools or appropriate depressional wetlands are not present within the project site.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry (Sambucus species) shrubs as primary host species.	**Habitat Not Present**. Elderberry shrubs are not located within the project site or within 165 feet of the project site.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Occurs in vernal pools and other depressional wetlands.	**Habitat Not Present**. Vernal pools or appropriate depressional wetlands are not present within the project site.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Fish				
Hypomesus transpacificus Delta smelt	FT	CE	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though never observed, spawning is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	**Habitat Not Present.** Tidally influenced sloughs or drainages are not present within the project site.
Oncorhynchus tshawytscha Chinook salmon (Central Valley Fall Run ESU)	--	CSC	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**Habitat Not Present**. Drainages, streams, or rivers are not present within the project site.
Oncorhynchus mykiss irideus Central Valley steelhead	FE	--	Anadromous species requiring cool freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**Habitat Not Present**. Drainages, streams, or rivers are not present within the project site.
Amphibians				
Rana draytonii California red-legged frog	FT	CSC	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	**Habitat Not Present**. The project site does not contain suitable habitat for CRLF. The nearest potential habitat is within a pond approximately 300 feet west of the site. The nearest confirmed population of CRLF is 30 miles northeast of the site in Michigan Bluff. An unverified occurrence of CRLF is located near Folsom Lake, approximately 10 miles southeast of the site, and includes the sighting of a juvenile frog on a footbridge near Folsom Lake by a State Parks biologist, which has not been verified by other biologists and is considered a misidentification and

(Continues on next page)

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
				erroneous.
Rana boylii Foothill yellow-legged frog	--	CC, CSC	Occurs in shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate. Found from sea level to 5,000 feet in the Sierra Nevada.	**Habitat Not Present**. Drainages with a boulder or cobble substrate do not occur within the project site.
Reptiles				
Actinemys marmorata Western pond turtle	--	CSC	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**Habitat Not Present**. The on-site irrigation canal is concrete-lined and contains fast-flowing water, which is not suitable habitat for the species. The nearest potential habitat is within a pond approximately 300 feet west of the project site. A turtle was observed within the pond during a site visit in the summer of 2020; however, the western pond turtle would be unlikely to traverse 300 feet through dry barren uplands into the project site where suitable habitat does not occur.
Thamnophis gigas Giant garter snake	FT	CT	Occurs in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow-moving water and heavy emergent vegetation.	**Habitat Not Present**. The canal within the project site does not contain emergent vegetation required by the species. The site is outside of the known range for the species.
Birds				
Agelaius tricolor Tricolored blackbird	--	CT, CSC	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	**Habitat Not Present**. Suitable nesting habitat for the species is not present within the project site. Additionally, the species has not been documented within five miles of the site.
Progne subis Purple martin	--	CSC	Nests in tall bridges and overpasses near water and open areas.	**Habitat Not Present**. The project site does not include tall bridges or overpasses.
Falco peregrinus anatum American peregrene falcon	Delisted	Delisted, CFP	Nests on cliffs and tall manmade structures.	**Habitat Not Present**. Suitable nesting or foraging habitat for the species is not present within the project site.

(Continues on next page)



Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Circus cyaneus Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savanna habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	**Low**. The annual brome grassland and ruderal habitat provides marginal nesting and foraging habitat for the species.
Lanius ludovicianus Loggerhead shrike	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	**High**. The annual brome grasslands throughout the project site provide suitable foraging habitat for loggerhead shrike, and the trees and shrubs within the site provide suitable nesting habitat.
Athene cunicularia Burrowing owl	--	CSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	**Habitat Not Present**. Large mammal burrows or other burrowing owl refugia, such as debris piles, were not observed within the project site. Additionally, the site is just outside of the historical breeding range for the species.
Buteo swainsoni Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**Habitat Not Present**. The annual grassland within the project site is fragmented and too small to provide suitable foraging habitat for Swainson's hawk. The species has not been documented within five miles of the site. The nearest Swainson's hawk nests are located approximately 5.5 miles southwest and approximately seven miles west of the site; however, the occurrences represent the far eastern extent of the species within south Placer County. Thus, the site is believed to be outside of the known range of the species.
Pandion haliaetus Osprey	--	WL	Nests in large trees, snags, and dead-topped trees in open forest habitats near waterbodies with fish.	**Habitat Not Present**. Suitable nesting or foraging habitat for the species is not present within the project site.

(Continues on next page)

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Elanus leucurus White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Present**. The open areas throughout the project site provide suitable foraging habitat for white-tailed kite, and the trees throughout the site provide suitable nesting habitat. The species was observed foraging in the project site.
Laterallus jamaicensis coturniculus California black rail	--	CT	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	**Habitat Not Present**. The aquatic resources within the project site do not provide suitable dense emergent marsh vegetation required by the species.
Mammals				
Antrozous pallidus Pallid bat	--	CSC, WBWG H	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and buildings.	**Habitat Not Present**. Suitable roosting habitat was not identified within the project site.
Corynorhinus townsendii Townsend's big-eared bat	--	CC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance.	**Habitat Not Present**. Caves or cave analogues are not present on-site.
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The silver-haired bat forages in open wooded areas near water features.	**Habitat Not Present**. Suitable roosting habitat was not identified within the project site.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Lasiurus blossevillii Western red bat	--	CSC, WBWG H	Roosts primarily in the foliage of trees or in shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. The species may associate with intact riparian habitat, particularly willows, cottonwoods, and sycamores.	**Habitat Not Present**. Suitable roosting habitat was not identified within the project site.
Lasiurus cinereus Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	**Habitat Not Present**. Suitable roosting habitat was not identified within the project site.

Status Codes:
CC: CDFW Candidate for Listing
CE: CDFW Endangered
CFP: CDFW Fully Protected
CRPR: California Rare Plant Rank
CSC: CDFW Species of Concern
CR: California Rare
CT: CDFW Threatened
FE: Federally Endangered
FT: Federally Threatened
WL: CDFW Watch List
WBWG M: Western Bat Working Group Medium Threat Rank
WBWG H: Western Bat Working Group High Threat Rank

Source: Madrone Ecological Consulting, 2022.

- Present: Species occurs within the study area based on California Natural Diversity Database (CNDDB) records and/or was observed within the study area during the field surveys;
- High: The study area is within the known range of the species and suitable habitat exists within the study area;
- Moderate: The study area is within the known range of the species and very limited suitable habitat within the study area;
- Low: The study area is within the known range of the species and marginally suitable habitat exists within the study area or the species was not observed during protocol-level surveys conducted within the study area; or
- Absent/Habitat Not Present: The study area does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted within the study area, or the study area is outside the known range of the species.

Species that are considered *present* include white-tailed kite. Species that are considered to have *high* potential to occur include loggerhead shrike. Species that are considered to have *low* potential to occur include northern harrier. The following discussions provide further details of the three special-status wildlife species with potential to occur within the project site.

Northern Harrier

The northern harrier *(Circus cyaneus)* is not listed pursuant to either the CESA or FESA; however, the species is considered to be a species of special concern by the CDFW. The species is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California. The northern harrier is a ground-nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savanna habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands.

The on-site annual brome grassland and ruderal habitat represent marginal nesting and foraging habitat for the species. Northern harrier has not been documented in the CNDDB within five miles of the project site. Based on the above, northern harrier has *low* potential for occurrence within the site.

White-Tailed Kite

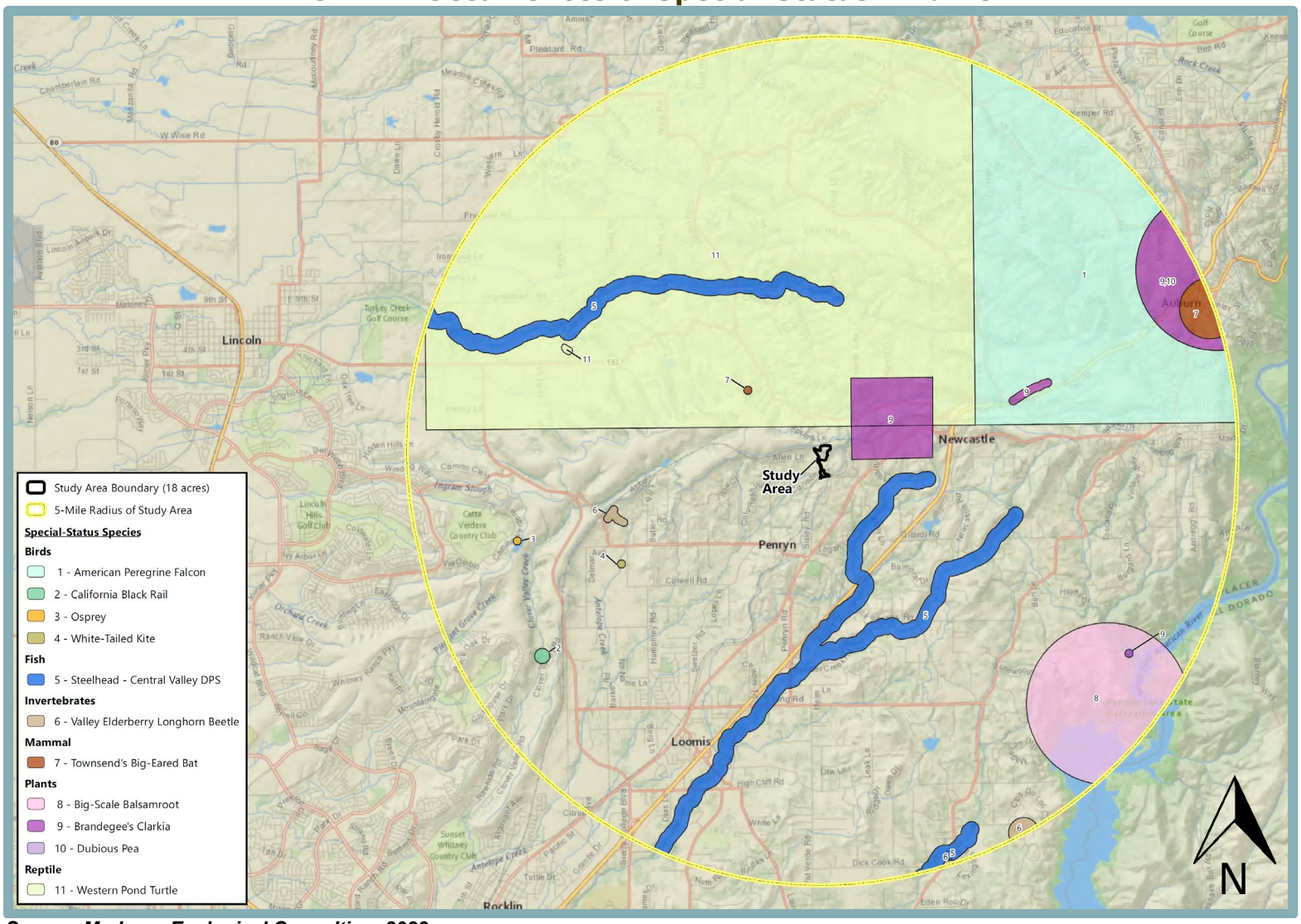
White-tailed kite (*Elanus leucurus*) is not federally or State listed. The raptor is a CDFW fully protected species. White-tailed kite is a yearlong resident of the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannas, and emergent wetlands. White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savanna habitats of the Central Valley and Coast Range.

The annual brome grassland within the project site provides foraging habitat for white-tailed kite, and the on-site trees provide suitable nesting habitat. The species was observed foraging in the project site during the field survey. The nearest documented CNDDB occurrence of a white-tailed kite is located approximately 2.5 miles southwest of the project site (see Figure 7-3). Based on the above, white-tailed kite is considered *present* within the site.

Loggerhead Shrike

The loggerhead shrike *(Lanius ludovicianus)* is not listed, pursuant to either the FESA or CESA. The species is a CDFW Species of Special Concern.

Figure 7-3
CNDDB Occurrences of Special-Status Wildlife



Source: Madrone Ecological Consulting, 2022.

Loggerhead shrikes nest in small trees and shrubs in woodland and savanna vegetation communities, and forage in open habitats throughout California. The nesting season ranges from March through June.

The trees and annual brome grassland within the project site provide suitable foraging and nesting habitat for loggerhead shrike. The species has not been documented in the CNDDB within five miles of the project site. Based on the above, loggerhead shrike has *high* potential for occurrence within the study area.

Trees

An Arborist Report was prepared for the proposed project by Cal TLC, which included a tree survey initially conducted on the dates of July 7-9, July 28-31, and August 1, 2020. Three additional trips were made to the project site in January, February and March of 2021 to collect additional tree data subsequent to modification of the project scope.

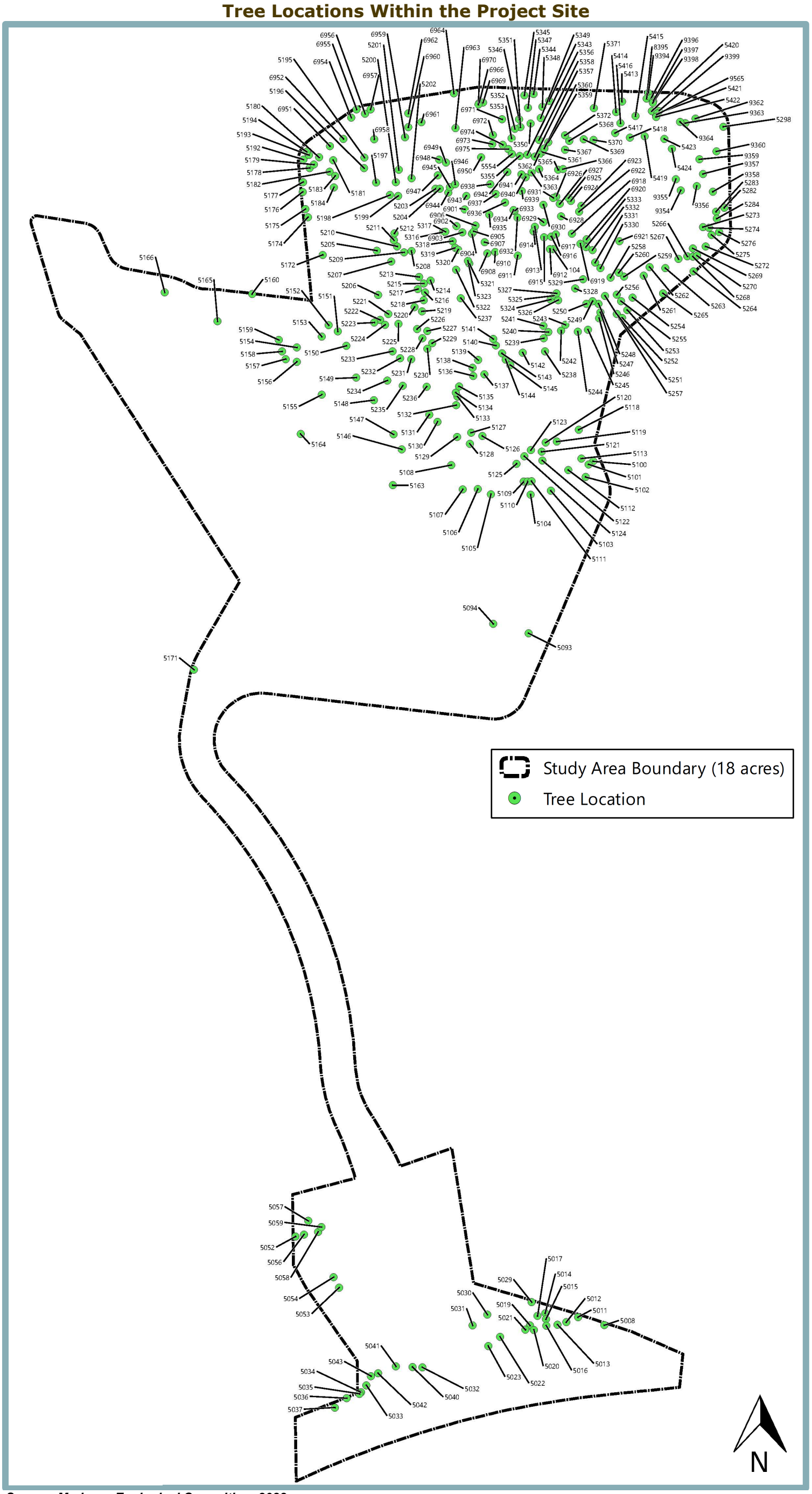
Further details on the methodology employed as part of the Arborist Report is provided in the Method of Analysis subsection. The findings of the Arborist Report were incorporated by Madrone into the BRA.

Cal TLC inventoried a total of 345 trees within the project site. “Trees” under the Placer County Woodland Preservation Ordinance (Tree Ordinance) (Article 19.50 of the Placer County Code), which is discussed further in the Regulatory Context section of this chapter, includes all tall woody plants native to California (except gray pines and “brush”), with a single main stem or trunk at least six inches in diameter at breast height (DBH), or with multiple trunks with an aggregate of at least 10 inches DBH. Of the 345 trees within the project site, 331 are native trees protected by the County and 14 are non-native ornamentals or gray pines which are not protected.

Figure 7-4 shows on-site tree locations. Table 7-4 provides an inventory summary and includes an arborist rating. The arborist rating is based on both the health and structure of the tree. The trees were rated for condition, pursuant to the recognized national standard set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The scale is as follows:

- Rating 0: Indicates a tree does not have a significant sign of life.
- Rating 1: Problems are extreme. The rating is assigned to a tree that has structural and/or health problems that cannot be changed through any amount of arboricultural work.
- Rating 2: The tree has major problems. If the option is taken to preserve the tree, the tree’s condition could be improved with correct arboricultural work, including, but not limited to, pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, risk of failure may be reduced and the rating may be elevated to a Rating 3 depending on the type and location of defects. If action is not taken, the tree is considered a risk liability and should be removed.
- Rating 3: The tree is in fair condition. Some minor structural or health problems exist, but they do not pose immediate danger. When the recommended actions in an arborist report are completed correctly, the defect(s) can be minimized and/or risk reduced.

Figure 7-4
Tree Locations Within the Project Site



Source: Madrone Ecological Consulting, 2022.

Table 7-4
Trees Mapped Within the Project Site

Species	Arborist Rating					Total	Total 3-5
	1	2	3	4	5		
Buckeye	-	1 (15)	3 (30)	-	-	4 (45)	3(30)
Incense Cedar	-	5 (40)	1 (12)	-	-	6 (52)	1 (12)
Deodar Cedar	-	2 (16)	-	-	-	2 (16)	-
Blue Gum Eucalyptus	1 (44)	1 (13)	-	-	-	2 (57)	-
Toyon	1 (7)	-	-	-	-	1 (7)	-
Ponderosa Pine	-	3 (54)	1 (18)	-	-	4 (72)	1 (18)
Gray Pine	1 (12)	1 (18)	-	-	-	2 (30)	-
Blue Oak	20 (216)	87 (1,214)	42 (556)	2 (45)	-	151 (2,031)	44 (601)
California Black Oak	2 (34)	5 (50)	4 (49)	-	-	11 (133)	4 (49)
Valley Oak	-	-	1 (13)	-	-	1 (13)	1 (13)
Interior Live Oak	64 (1,069)	88 (1,412)	7 (84)	-	-	159 (2,565)	7 (84)
Oracle Oak	-	-	1 (14)	-	-	1 (14)	1 (14)
Coast Redwood	-	-	1 (22)	-	-	1 (22)	1 (22)
Number of Trees	**89**	**193**	**61**	**2**	**-**	**345**	**63**
Cumulative DBH	**1,382**	**2,832**	**798**	**45**	**-**	**5,057**	**843**

Note: DBH is shown in parentheses.

Source: Madrone Ecological Consulting, 2022.

- Rating 4: The tree is in good condition and apparent problems that a Certified Arborist can see from a visual ground inspection do not exist. If potential structural or health problems are tended to, future risk of branch or tree failure can be reduced and more serious health problems can be averted.
- Rating 5: Problems are not found from a visual ground inspection. Structurally, the trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common.

7.3 REGULATORY CONTEXT

A number of federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to biological resources.

Federal Endangered Species Act

The U.S. Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [3], [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR Section 17.3). Harass is defined as actions that create the likelihood of injury to

listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

For federally listed species covered under the PCCP, the Biological Opinion issued by the USFWS for the PCCP provides take coverage for covered projects under the PCCP that may impact federally listed species that are covered species under the PCCP. Further consultation is not required as long as the covered project complies with PCCP requirements. For federally listed species that are not covered species under the PCCP, take coverage is required as outlined below.

In the context of the proposed project, FESA consultation with USFWS or the NMFS would be initiated if development resulted in take of a threatened or endangered species not covered under the PCCP or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species not covered under the PCCP or adversely modify critical habitat of such a species.

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the CFGC states, "It is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto."

Clean Water Act

The U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharge of fill material" is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (Title 33 of U.S. Code [USC], Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR Section 328.3[b]).

Furthermore, jurisdictional waters of the United States can be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the

soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

For covered projects under the PCCP, impacts to 404 jurisdictional waters are addressed under the County Aquatic Resources Program (CARP) which allows a streamlined 404 permitting process for covered activities under the PCCP that will result in impacts to aquatic resources subject to Section 404 jurisdiction.

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the CFGC, such as CESA (CFGC Section 2050, et seq.), Fully Protected Species (CFGC Section 3511) and the Lake or Streambed Alteration Agreement Program (CFGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that "overriding considerations" exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

As with FESA, for covered projects that may impact State-listed species under CESA that are also covered species under the PCCP, direct consultation with CDFW for State-listed take authorization is not required as long as the covered project complies with PCCP requirements. For projects that may result in take of State-listed species that are not PCCP covered species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGC Section 2081).

California Fish and Game Codes

A number of species have been designated "fully protected" species under Sections 5515, 5050, 3511, and 4700 of the CFGC, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The CFGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Birds of prey are protected in California under provisions of the CFGC Section 3503.5 (1992), which states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) 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." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the CFGC Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, State or local government agency, or public utility that proposes an activity that will:

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

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into a Lake or Streambed Alteration Agreement.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern" developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Quality Control Boards (RWQCBs) are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate the Porter-Cologne Water Quality Control Act [Porter-Cologne Act, Water Code Section 13000 et seq.] and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges

within waters of the U.S., and also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDR) for dredge or fill activities. The State Office of Administrative Law (OAL) approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Act is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to biological resources are applicable to the proposed project.

Water Resources

Goal 6.A To protect and enhance the natural qualities of Placer County's rivers, streams, creeks and groundwater.

Policy 6.A.1 The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old growth woodlands, and the habitat of special status, threatened or endangered species (see discussion of sensitive habitat buffers in Part I of this Policy Document). Based on more detailed information supplied as a part of the review for a specific project or input from state or federal

regulatory agency, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:

1. Reasonable use of the property would otherwise be denied;
2. The location is necessary to avoid or mitigate hazards to the public;
3. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
4. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.

Policy 6.A.3 The County shall require development projects proposing to encroach into a stream zone or stream setback to do one or more of the following, in descending order of desirability:

a) Avoid the disturbance of riparian vegetation;
b) Replace all functions of the existing riparian vegetation (on-site, in-kind);
c) Restore another section of stream (in-kind);
d) Restore another section of stream (in-kind); and/or
e) Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).

Policy 6.A.4 Where stream protection is required or proposed, the County should require public and private development to:

a) Preserve stream zones and stream setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a stream is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
b) Designate such easement or dedication areas (as described in a. above) as open space;
c) Protect stream zones and their habitat value by actions such as: 1) providing an adequate stream setback, 2) maintaining creek corridors in an essentially natural state, 3) employing stream restoration techniques where restoration is needed to achieve a natural stream zone, 4) utilizing riparian vegetation within stream zones, and where possible, within stream setback areas, 5) prohibiting the planting of invasive, non-native plants (such as Vinca major and eucalyptus) within

stream zones or stream setbacks, and 6) avoiding tree removal within stream zones;

d) Provide recreation and public access near streams consistent with other General Plan policies;

e) Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.

f) Provide for long-term stream zone maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

Policy 6.A.5 The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

Wetland and Riparian Areas

Goal 6.B To protect wetland communities and related riparian areas throughout Placer County as valuable resources.

Policy 6.B.1 The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

Policy 6.B.2 The County shall require new development to mitigate wetland loss in both federal jurisdictional and non-jurisdictional wetlands to achieve "no net loss" through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation and conservation banking program that provides the opportunity to mitigate impacts to special status, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas. Non-jurisdictional wetlands may include riparian areas that are not federal “waters of the United States” as defined by the Clean Water Act.

Policy 6.B.3 The County shall discourage direct runoff of pollutants and siltation into wetland areas from outfalls serving nearby urban development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.

Policy 6.B.4 The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.

Policy 6.B.5 The County shall require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. Consideration shall be given to out-of-kind compensatory mitigation for wetland impacts when larger landscape-level goals and objectives may be met by doing so. The County shall continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than significant impact under CEQA.

Fish and Wildlife Habitat

Goal 6.C To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 6.C.1 The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened, or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, and vernal pool/grassland complexes.
f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones,

avian mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.

g) Important spawning and rearing areas for anadromous fish.
h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.C.2 The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

Policy 6.C.3 The County shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, fish, and wildlife.

Policy 6.C.4 The County shall encourage private landowners to adopt sound fish and wildlife habitat management practices, as recommended by California Department of Fish and Wildlife officials, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, and the Placer County Resource Conservation District.

Policy 6.C.6 The County shall support programs that preserve the habitats of threatened, endangered, and/or other special status species including the implementation of the Placer County Conservation Program. Where County acquisition and maintenance is not practicable or feasible, federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.

Policy 6.C.7 The County shall support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or non-game species, through maintenance of habitat diversity.

Policy 6.C.9 The County shall require new private or public developments to preserve and enhance existing riparian habitat unless public safety concerns require removal of habitat for flood control or other essential public purposes (See Policy 6.A.1.). In cases where new private or public development results in modification or destruction of riparian habitat the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.

Policy 6.C.11 Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the County shall require, as part of the environmental review process, a biotic resources evaluation of the sites by a wildlife biologist, the evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence

of special status, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the decision-making body shall determine the feasibility of the identified mitigation measures and whether the approval affects the viability of County, state or federal conservation programs that seek to protect the significant ecological resource areas.

Significant ecological resource areas shall, at a minimum, include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, vernal pool/grassland complexes habitat.
f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
g) Important spawning and rearing areas for anadromous fish.
h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.C.12 The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed threatened, or endangered plant and animal species, or any species listed in an implementing agreement for a habitat conservation plan and natural communities conservation plan such as the Placer County Conservation Program.

Policy 6.C.13 The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered or threatened species and their habitats, wetland habitats, wildlife migration corridors, and locally important species/communities.

Vegetation

Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.

Policy 6.D.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

Policy 6.D.2 The County shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits or for project mitigation.

Policy 6.D.3 The County shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, vernal pools, and habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.D.4 The County shall ensure that landmark trees and major groves of native trees are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.

Policy 6.D.5 The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.6 The County shall ensure the conservation of sufficiently large, continuous expanses of vegetation that provides suitable habitat for maintaining abundant and diverse wildlife including habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.D.7 The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible.

Policy 6.D.8 The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.9 The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.

Policy 6.D.10 The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife,

and ensure that a maximum number and variety of well-adapted plants are maintained.

Policy 6.D.11 The County shall support the continued use of prescribed burning, mastication, chipping, and other methods to mimic the effects of natural fires to reduce fuel loads and associated fire hazard to human residents and to enhance the health of biotic communities.

Policy 6.D.14 The County shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants, riparian areas). Where feasible, these areas should be protected through public acquisition of fee title or conservation easements to ensure protection.

Open Space for the Preservation of Natural Resources

Goal 6.E To preserve and enhance open space lands to maintain the natural resources of the County.

Policy 6.E.1 The County shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including wetlands, riparian corridors, unfragmented woodlands, and floodplains.

Policy 6.E.2 The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:

a) High erosion hazard areas;
b) Scenic and trail corridors;
c) Streams, riparian vegetation;
d) Wetlands;
e) Significant stands of vegetation;
f) Wildlife corridors;
g) Any areas of special ecological significance
h) Habitat necessary to sustain protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.E.3 The County shall support the conservation of open space and natural areas that are interconnected and of sufficient size to protect biodiversity, sustain viable populations, accommodate wildlife movement, and sustain ecosystems. In particular, lands within the Placer County Conservation Program Plan Area that meet these criteria are a priority for conservation.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Natural Resources Management Element related to biological resources are applicable to the proposed project.

Hydrology and Water Quality

Goal 2 Safeguard and maintain natural waterways to ensure water quality, flora and fauna species diversity and unique wildlife habitat preservation.

Policy 5 Encourage the use of open space to preserve and enhance the watersheds, stream corridors and wetlands significant to the protection of water resources such as the American River/Folsom Lake, Secret Ravine, Miners Ravine, Antelope Creek, and Mormon Ravine.

Vegetation

Goal 1 Preserve outstanding areas of native vegetation and trees, natural topographic features, wildlife habitats and corridors, and riparian corridors.

Goal 2 Conserve significant grassland and wooded areas as essential economic, natural, and aesthetic resources.

Goal 3 Protect, restore, and enhance threatened and endangered species and the habitat which supports those species.

Policy 1 Preserve in their natural conditions stream environment zones, including floodplains and riparian vegetation along creeks and canals.

Policy 2 The natural resources and features of a site proposed for development shall be the predominant planning factor that determines the scope and magnitude of the development. Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any land development project, paying particular attention to its protection and the preservation of existing native vegetation.

Policy 3 Site specific surveys by qualified professionals shall be required prior to development to delineate wetlands in the Plan area. All development proposals involving wetlands shall be coordinated with the California Department of Fish and Game, Army Corps of Engineers and U.S. Fish and Wildlife Service. The “no-net-loss” policy (2:1 replacement) of requiring preservation of all wetland sites, or preservation of priority wetlands and compensation for wetland losses, shall continue to be provided. Wherever artificial means are utilized in wetlands management, insure that appropriate biota-oriented vector control management strategies are incorporated (i.e. through the use of minnows predatory upon mosquitoes).

Policy 4	Where impacts to stream environment zones or wetland areas are unavoidable, project specific mitigation shall include the identification and quantification of vegetation impacted, the preparation of revegetation plans to assure no net loss of riparian or wetland acreage or values, and the specific monitoring of plans to assure compliance and satisfactory results.
Policy 5	Require a minimum 100' non-development setback from the centerline of perennial streams, and a minimum 50' setback from intermittent streams (see Exhibit E) as part of permanent protection easements. Said setback areas shall be increased if necessary, to include the future, fully developed 100-year floodplain and all streamside riparian vegetation.
Policy 6	An inventory of important natural resources, including streams, water bodies, oak woodlands, wildlife habitat, vegetation, and geological features, mineral resources, and soil types shall be created so that they may be more easily identified during project review and effective measures can be designed for their protection. Site specific studies, including mitigation monitoring programs, shall be prepared by qualified professionals for all projects which impact unique or significant fish, wildlife or vegetative resources.
Policy 7	Require field studies by qualified professionals as part of the environmental review process for projects where the habitat of special status species is known to exist in order to document the possible occurrence of special status plant species and provide a method of protecting, monitoring, replacing or otherwise mitigating the impacts of development in and around these sensitive habitats.
Policy 8	Establish procedures for identifying and preserving threatened or endangered plant species, when they are adversely affected by public or private development projects.
Policy 9	Conserve representative areas of undisturbed oak woodlands and valley grasslands that have significant value as wildlife habitat in protective easements, or the equivalent.
Policy 10	Preserve and protect landmark trees and major groves of native trees in protective easements, or the equivalent.
Policy 11	In landscaping of individual sites and replanting where original vegetation has been destroyed or removed, the emphasis shall be on use of native or native-appearing rather than exotic plants. In areas of high risk, however, it may be preferable to introduce carefully chosen exotics with high fire resistance characteristics.
Policy 12	Recognize that rock outcroppings provide nesting, breeding and foraging resources for a wide variety of terrestrial and avian species inhabiting the Sierra Foothills, and shall be preserved by

incorporating such areas into private project designs.

Fish and Wildlife

Goal 1 Conserve the quality of habitats which support fish and wildlife species so as to maintain populations at sustainable levels.

Goal 2 Protect, restore, and enhance habitats for native animals, and protect threatened, endangered, and special-status species.

Policy 1 Conserve large, continuous expanses of native vegetation as the most suitable habitat for maintaining abundant and diverse wildlife.

Policy 2 Identify and protect important spawning grounds, migratory routes, waterfowl resting areas, oak woodlands, wildlife corridors, and other unique wildlife habitats critical to protecting and sustaining wildlife populations.

Policy 3 Carefully plan development in areas known to have particular value for wildlife and, where allowed, locate development so that the reasonable value of the habitat for wildlife is maintained.

Policy 4 Recognize that stream channels, riparian corridors, natural drainages and the high quality of waters therein, are important as regional wildlife and fishery corridors.

Policy 6 Encourage private landowners to adopt good wildlife habitat management practices, as recommended by California Department of Fish and Game officials and the Placer County Resource Conservation District.

Policy 7 Require 100' non-development setbacks from the centerline of perennial streams, and 50' non-development setbacks from intermittent streams as part of permanent protection easements (see Exhibit E). Setback areas shall be increased as necessary to include the future, fully developed 100' floodplain and all streamside vegetation.

Policy 8 Give special consideration to the habitats of rare, threatened, endangered, and/or other special-status species in the Plan area. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.

Policy 9 Require field studies by qualified professionals as part of the environmental review process for projects where the habitat of a special-status species has been identified. These studies shall document the possible occurrence of special-status wildlife species and provide a method for their protection, monitoring, replacement,

or for otherwise mitigating development near their sensitive habitats.

Open Space

Goal a Preserve and enhance open space lands to maintain the natural resources and rural characteristics of the area, and to protect wildlife habitats and other areas of major or unique ecological significance.

Policy b Preserve agricultural lands as an economically viable land use, and for the purposes of open space, wildlife habitat, buffering, flood control and soil conservation.

Policy c In the design and construction of new development, the following types of areas and features shall be preserved as open spaces to the maximum extent feasible: high hazard areas (erosion, landslides, wildland fires, floodplains, high noise exposure, etc.) scenic and trail corridors, streams, streamside (riparian) vegetation, wetlands, other significant stands of beneficial native vegetation, and any areas of special ecological significance. These sensitive areas should be mapped before designing a project so that priority is placed on protecting these areas and features rather than retrofitting a development project onto the property.

Policy n In cooperation with the Resource Conservation District, identify those segments of watersheds and wetlands affecting the American River/Folsom Lake, Secret Ravine, Antelope Creek, Miner's Ravine, Mormon Ravine, and other waterways important to water resource protection which are in need of rehabilitation through revegetation and implement a plan for same. Wherever development removed vegetation important to watersheds, require as a part of the environmental review process that revegetation methodologies for watershed protection be identified and implemented.

Policy p Protect natural areas along creeks and canals through the use of non-development setbacks with setback distances varying according to the significance of the area to be protected.

Placer County Conservation Program

On September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the FESA and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP includes the CARP to issue permits related to the CWA and the CFGC.

As a permittee under the PCCP, Placer County can transfer take authorization to private entities conducting activities covered by this Plan and under their jurisdiction. Covered Activities are generally any actions undertaken in the Plan Area by or under the authority of the Permittees that may affect Covered Species or covered natural communities. The area proposed for permit coverage under the HCP/NCCP has two main parts and associated subcomponents: (1) Plan

Area A, comprised of Valley and Foothill areas; and (2) Plan Area B, which consists of subcomponent areas B1 through B5. The project site is within Plan Area A, which is the main focus of the HCP/NCCP and where all future growth and most of the Covered Activities will take place. Plan Area A is covered by a comprehensive permit and is comprised of the City of Lincoln plus all unincorporated lands within western Placer County: approximately 210,000 acres, or roughly five-sixths of western Placer County.

The Foothills portion of Plan Area A, within which the project site is located, comprises the unincorporated communities along the Interstate 80 corridor, the unincorporated Auburn area, and the northern Foothills that support most of the woodland communities in the Plan Area. The Foothills portion comprises approximately 109,134 acres. The project site is also located within sub-area A3 of the PCCP, defined as a Foothill Potential Future Growth Area.

The PCCP addresses 14 Covered Species and several Covered Natural Communities, and includes conservation measures to protect all 14 Covered Species and their habitats. Avoidance and minimization measures are set forth in Chapter 6 of the PCCP, and are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized.

Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees can include Land Conversion fees and Aquatic/Wetland Special Habitat fees.

The proposed project would participate in the PCCP for incidental take coverage and mitigation for effects to waters of the U.S., state, and county as well as oak woodlands.

7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, a significant impact would occur if the proposed project would result in the following:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan;
- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of or restrict the range of an endangered, rare, or threatened species; or
- Have a substantial adverse effect on the environment by converting oak woodlands.

Method of Analysis

The information presented in this chapter is primarily based on the BRA and ARD prepared by Madrone, as well as the Arborist Report prepared by Cal TLC.

Biological Resource Assessment

The analysis within the BRA (see Appendix D of this EIR) is based on a literature review and field surveys of the project site and parcel area, which are detailed further below.

Literature Review

A list of special-status plant and wildlife species with potential to occur within the project site was developed as part of the BRA through queries of the following databases:

- CNDDB query of the project site and all areas within five miles of the site (see Figure 7-3);
- USFWS Information for Planning and Conservation (IPaC) query of the project site (included as Attachment B of the BRA);
- CNPS Rare and Endangered Plant Inventory query of the “Rocklin, California” U.S. Geological Survey topographic quadrangle and the eight surrounding quadrangles (included as Attachment C of the BRA); and
- Western Bat Working Group Species Matrix.

In addition, any special-status species that are known to occur in the project region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the project site.

Field Surveys

A Madrone biologist conducted field surveys of the project site and parcel area to assess the suitability of habitats on-site to support special-status species on June 30, July 1, and December 31, 2020 and April 16 and May 20, 2021. Meandering pedestrian surveys were performed on foot throughout the site. Vegetation communities were classified in accordance with The Manual of California Vegetation, Second Edition, but were cross-walked to the closest land cover types as described in the PCCP. Plant taxonomy was based on the nomenclature in the Jepson eFlora. PCCP Land Covers were mapped within the study area. A list of all wildlife species observed during field surveys is included as Attachment D in the BRA. A bat roost habitat assessment was

conducted on December 31, 2020 for all trees located within the project site to determine whether suitable bat roost habitat (caves, tree hollows, snags, or tree cavities) occurs in the project site.

With respect to plant species protected under CEQA, protocol-level special-status were conducted on April 16 and May 20, 2021, in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants, CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, and the CNPS Botanical Survey Guidelines.

Aquatic Resources Delineation Report

Madrone conducted a delineation of aquatic resources within the project site on June 30 and July 1, 2020. Water features and data points were mapped in the field with a Global Positioning System (GPS) unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the USACE Updated Map and Drawing Standards for the South Pacific Division Regulatory Program. The GPS data was overlaid on an ortho-rectified aerial photograph.

The delineation was performed in accordance with the USACE Wetlands Delineation Manual, the Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (Version 2.0), A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western U.S., and the Sacramento District's Minimum Standards for Acceptance of Preliminary Wetlands Delineations. USACE regulations (33 CFR Part 328) were used to determine the presence of waters of the U.S. other than wetlands. The most recent National Wetland Plant List was used to determine the wetland indicator status of plants observed in the project site. The Jepson eFlora was used for plant nomenclature, except where the Jepson eFlora conflicted with the nomenclature in the National Wetland Plant List, which was given priority on the data sheets.

Oak Resources Technical Report

The purpose of the Arborist Report, which serves as a preliminary analysis, was to evaluate the trees within the project site's proposed area of disturbance (as shown on the project development plans) and provide documentation of the inventoried trees and a canopy assessment for purposes of obtaining a building permit. Cal TLC conducted the tree survey, which initially occurred on the dates of July 7-9, July 28-31, and August 1, 2020. Three additional trips were made to the project site in January, February, and March of 2021 to collect additional tree data subsequent to modification of the project scope.

With respect to the arborist ratings, which are based on the recognized national standard set up by the Council of Tree and Landscape Appraisers and the ISA, trees with a rating of 0 through 2 are either dead or have major health or structural problems and do not require mitigation to address potential project impacts. Only trees with a rating of 3 through 5 require mitigation.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

7-1 Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications. Based on the analysis below, the impact is *less than significant*.

As discussed above, the project site primarily consists of barren areas. Portions of the site's southern end are completely unvegetated, while other areas consist of sparse to robust patches of ruderal grasses and forbs that are regularly maintained. Small patches of oak woodland and nonnative ornamental trees are located along Callison Road, which cuts through the southern portion of the site. Several unvegetated dirt roads are interspersed throughout. In addition, the northern portion of the project site consists of a hill that generally slopes downward towards the south. Annual brome grassland is located along the lower slopes of the hill. The vegetation within the grassland community is generally robust and dominated by annual grasses and forbs. The upper portions of the hill feature oak woodland dominated by blue oak.

The proposed project would consist of a full-production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and on-site parking areas. The project would also include installation of various infrastructure components, including, but not limited to, a private driveway and covered utility pad. Development of the aforementioned components would require removal of existing on-site oak woodlands and grassland. Approximately 190,000 cubic yards of fill, 165,000 cubic yards of cut, and 25,000 cubic yards of excavation, including the wine cave, would occur; however, cut and fill would overall balance on-site.

As detailed in Table 7-3, pursuant to the CNDDB, IPaC, and CNPS database query results returned for the project region, 24 special-status plant species have the potential to occur within the greater vicinity of the project site. However, all aforementioned plant species were confirmed through protocol-level, appropriately-timed, special-status plant surveys to either be absent from the site or lack the necessary habitat to occur within the project site.

Based on the above, the proposed project would not result in impacts to special-status plant species either directly or through substantial habitat modifications, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

7-2 Impacts to special-status wildlife species either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

A total of 26 special-status wildlife species were found to have potential to occur within the greater project vicinity, according to CNDDB query results returned for the region. However, of the total, 23 of the identified wildlife species do not have any level of potential to occur on-site, due to the project footprint lacking the necessary habitat to accommodate such species. For instance, conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp require vernal pools and other depressional wetlands; however, such aquatic features are not located on-site. Similarly, elderberry shrubs, upon which valley elderberry longhorn beetles depend, do not occur on-site. As detailed in Table 7-3, the same causal relationship between species and the absence of necessary habitat removes the possibility of the project potentially impacting the majority of special-status wildlife species with potential to occur in the greater vicinity.

However, the following special-status raptor and bird species have varying levels of potential to occur on-site: northern harrier, white-tailed kite, and loggerhead shrike. As discussed further under Impact 7-5, the project site includes approximately 13.7 acres of terrestrial land cover types that would be impacted by development of the proposed project, including 4.2 acres of blue oak woodland, 1.7 acres of annual brome grassland, and less than 0.1-acre of mixed oak woodland. The trees associated with the on-site oak woodland communities provide nesting habitat for the protected birds, and the annual grassland and the ruderal habitat provide foraging habitat. Additionally, a white-tailed kite has been documented within the CNDDB as having occurred 2.5 miles southwest of the project site (see Figure 7-3).

Although none of the aforementioned species are covered under the PCCP, native nesting birds, including raptors, are protected by CFGC Section 3503. Raptors, passerines, non-passerine land birds, and waterfowl are further protected under the MBTA. The MBTA prohibits the take, possession, purchase, sale, or bartering of any migratory bird, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. All migratory bird species are protected by the MBTA. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a ‘take’ of the species under federal law.

The proposed project would include grading activities, construction of winery structures, connection of structures to public utilities, and various on-site roadway and driveway improvements. If construction activities occur during the nesting season, which generally extends from February 1 to August 31, nests of both special-status and non-special-status native birds could be impacted by the various project components, conflicting with the provisions of CFGC Section 3503 and the MBTA.

Based on the above, the proposed project could result in impacts to special-status wildlife species either directly or through substantial habitat modifications, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

7-2 *Construction activities, such as vegetation clearing and grading activities, shall be completed between September 1 and February 1, if feasible, to avoid impacts to suitable nesting habitat during the typical nesting season. If vegetation removal and grading activities must occur during the nesting season (February 1 to August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, at most, three (3) days prior to the initiation of construction. If a break in construction activity of more than two (2) weeks occurs, then subsequent surveys shall be conducted.*

If active raptor nests are found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The foregoing non-disturbance buffers may be reduced if a smaller buffer is proposed by the project biologist and approved by Placer County after taking into consideration the natural history of the species of nesting bird, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (if visual or acoustic barriers are located between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.

A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency within 30 days of the completed survey and is valid for one construction season. If nests are not found, further mitigation shall not be required.

Should construction activities cause a nesting bird to exhibit any signs of distress (e.g., vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest), then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged, or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the buffer zone after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) is inactive, and that new nests have not been identified.

7-3 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS, or on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption,



or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Riparian habitats are lands that occur along watercourses and water bodies, with typical examples including streambanks and floodplains. Riparian habitats are distinctly different from surrounding lands, due to a riparian habitat's unique soil and vegetation characteristics, which are strongly influenced by the presence of water. The project site does not include riparian land cover.

With respect to State or federally protected wetlands, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. As previously discussed, the only aquatic resources identified within the project site as part of the ARD are a segment of the Antelope Canal within the northern portion of the site and an unvegetated, small roadside drainage ditch within the southern portion of the site along the south side of Callison Road. The acreages of aquatic resources that would be potentially impacted and avoided by the proposed project are provided in Table 7-5.

Table 7-5
Impacted and Avoided Aquatic Resources
Within the Project Site (acres)

Aquatic Resource	Impacted	Avoided	Total
Antelope Canal	0.000	0.093	0.093
Roadside Ditch (Riverine)	0.006	0.000	0.006
Total	**0.006**	**0.093**	**0.099**

Source: Madrone Ecological Consulting, 2022.

The Antelope Canal is a man-made, concrete-lined channel completely devoid of vegetation and conveys irrigation water from several sources including the Yuba River, Bear River, and the American River to properties in Penryn, Loomis, and unincorporated portions of western Placer County. The canal would not be impacted by the proposed project.

The small roadside drainage ditch along the south side of Callison Road is an unvegetated, shallow dirt feature that conveys ephemeral stormwater runoff from Callison Road. Water within the ditch drains a short distance to the southwest into a culvert. This ditch would be impacted by the proposed improvements to Callison Road that would be conducted as part of the project. While the roadside ditch was created in uplands to drain upland runoff, receives ephemeral flows, and is not a relocated tributary, absent confirmation from USACE that the roadside drainage ditch does not require Section 404 coverage, a significant impact could occur due to road improvement activities.

Based on the above, the proposed project could have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or federally protected

wetlands through direct removal, filling, hydrological interruption, or other means. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

7-3(a) *PCCP General Condition 1. Prior to Improvement Plan approval, the project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.*

The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following best management practices (BMPs). This list shall be included on the notes page of the Improvement Plan and Grading Plan and shall be shown on the plans:

1. *When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to PCCP Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).*
2. *Trash generated by Covered Activities shall be promptly and properly removed from the site.*
3. *Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on-site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.*

    a. *Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.*
    b. *Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification shall be properly*

maintained until construction is completed and the soils have been stabilized.

c. *Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.*
d. *Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (http://www.cal-ipc.org/paf/) but shall be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.*

4. *If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated stormwater filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar low impact development (LID) features to capture and treat flows, shall be installed consistent with local programs and ordinances.*

7-3(b) *<u>PCCP Community Condition 2.1</u>. To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.*

7-3(c) *Because the roadside ditch may be considered jurisdictional under CFGC Section 1600, the only way to determine whether the feature is jurisdictional under CFGC Section 1600 is to submit a Streambed Alteration Agreement Notification (Notification) to CDFW. Submittal of Notification would either result in a letter from CDFW stating a Streambed Alteration Agreement (Agreement) is not required, or issuance of an Agreement.*

Prior to commencement of ground disturbing activities, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for any impacts to aquatic features with a bed and/or bank, or riparian habitat associated with a CDFW jurisdictional aquatic resource. The information provided shall include a description of all of the activities associated with the project, not just those closely associated with the drainages and/or riparian vegetation. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided, as well as a description of stormwater treatment methods. Minimization and

avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific stormwater BMPs. Mitigation may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW.

7-3(d) *To address potential impacts to federally or State-protected wetlands, prior to the issuance of grading permits, the project applicant shall complete the following requirement:*

- *The project applicant shall submit the Aquatic Resources Delineation (ARD) to the USACE and RWQCB to determine if the roadside ditch is subject to USACE and/or RWQCB jurisdiction. If the roadside ditch is deemed non-jurisdictional by USACE and RWQCB, no further mitigation shall be required. If, on the other hand, the ditch is subject to USACE and/or RWQCB jurisdiction, then the applicant shall comply with applicable PCCP Conditions related to impacts to aquatic resources, as determined by the Placer Conservation Authority (PCA) and the Community Development Resource Agency.*

7-3(e) *CARP Authorization Conditions: During project construction activities, all work within the project plan area that impacts aquatic resources of Placer County shall be completed according to the plans and documents included in the CARP application, Water Quality Certification, and, if applicable, WDRs. All changes to those plans shall be reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, WDRs. Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required.*

A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the project site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available on-site at all times for review by site personnel and agencies.

Any construction within the stream system shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other aquatic resources of Placer County, and the stream zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.

Before beginning construction, the project applicant must have a valid CARP authorization or waiver notice. In order to obtain a permit, the applicant must pay all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank.

All deviations from plans and documents provided with the application and approved by Placer County Community Development Resource Agency must be reported to Placer County Community Development Resource Agency immediately.

Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.

All required setbacks shall be implemented according to PCCP Condition 4 (see PCCP Section 6.1.2).

Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1, prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at the Placer County Community Development Resource Agency's discretion and shall require surveys by a qualified biologist to determine the absence of nesting birds, prior to the activity.

Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. Such materials shall be placed a minimum of 50 feet away from aquatic environments. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency, which shall then immediately notify the appropriate State and federal agencies.

During construction, litter or construction debris shall not be dumped into water bodies or other aquatic resources; nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.

Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that

may be used in the project area shall be submitted to the Placer County Community Development Resource Agency before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity.

The Placer County Community Development Resource Agency shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. The Placer County Community Development Resource Agency shall suspend work and notify the USFWS, NMFS, and the CDFW for guidance.

Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.

All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.

At the end of each workday, all open trenches shall be provided with a ramp of dirt or wood to allow trapped animals to escape.

If human remains or cultural artifacts are discovered during construction, the applicant shall stop work in the area and notify the Placer County Community Development Resource Agency immediately. Work shall not continue in the area until the County Coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.

7-3(f) *PCCP Community Condition 1.2. After receiving a PCCP Certificate of Authorization and prior to construction, the project shall retain a qualified professional to temporarily stake non-vernal pool wetlands and their buffer that will be avoided to ensure construction equipment and personnel completely avoid such features. A note to such effect shall be shown on the Improvement Plans or Grading Plans and the location of temporary fencing demonstrated on the plans. Once installed, the applicant shall notify the PCA and the County of the temporary fencing and provide photographs as evidence of the installation. The fencing shall remain in place for the duration of ground-disturbing activities.*

7-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Based on the analysis below, the impact is *less than significant*.

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation also occurs when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance, such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thereby reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

As previously discussed, the project site primarily consists of barren areas, with portions of the site's southern end completely unvegetated and other areas consisting of sparse to robust patches of ruderal grasses and forbs that are regularly maintained. In addition, small patches of oak woodland and nonnative ornamental trees are located along Callison Road, several unvegetated dirt roads are interspersed throughout, and the northerly hill features annual brome grassland along the lower areas of the slopes and oak woodland along the higher areas. Due to the areas of open space currently provided, the project site could be used by common terrestrial species as a wildlife movement corridor between land uses east and west of the site, which are currently composed of scattered rural single-family residences, trees, and ruderal grassland. However, the area north of the site, beyond the UPRR mainline, would remain predominantly undeveloped, ensuring that movement corridors to habitats in the project vicinity are maintained. In addition, following development of the proposed project, the northern portion of the on-site hill would continue to provide blue oaks, which would allow the northern portion of the project site to continue to serve as a wildlife corridor. Finally, while a segment of the Antelope Canal runs through the project site, as discussed under Impact 7-2, the canal does not provide suitable habitat to accommodate special-status fish species that could potentially occur in the region.

Based on the above, implementation of the proposed project would not 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. Thus, the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

7-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As detailed in Table 7-6, of the 6.2 acres of blue oak woodland found on-site, the project would impact approximately 4.2 acres of blue oak woodland. Figure 7-5 shows the locations of the impacted land cover types within the project site. In addition, as detailed in Table 7-4, the project site contains 345 trees, 331 of which are native trees (see Figure 7-6). Finally, the site also contains 1.7 acres of annual grassland that would be impacted by the proposed project.

Table 7-6
Impacted and Avoided Terrestrial Land Cover Within the Project Site (acres)

Land Cover	Impacted	Avoided	Total
Natural Communities			
Blue Oak Woodland	4.2	2.0	6.2
Annual Brome Grassland	1.7	0.9	2.6
Interior Live Oak Woodland	0.0	<0.1	<0.1
Mixed Oak Woodland	<0.1	0.1	0.1
Non-Natural Communities			
Barren	7.8	1.4	9.2
Urban Woodland	<0.1	0.1	0.1
Total	**13.7**	**4.4**	**18.1***

* The total land cover acreage presented here is slightly larger than the approximate project acreage as defined in the Project Description chapter of this EIR (17.96 acres). This is to provide a conservative estimate of project impacts, in particular, as it relates to the ultimate project access improvements.

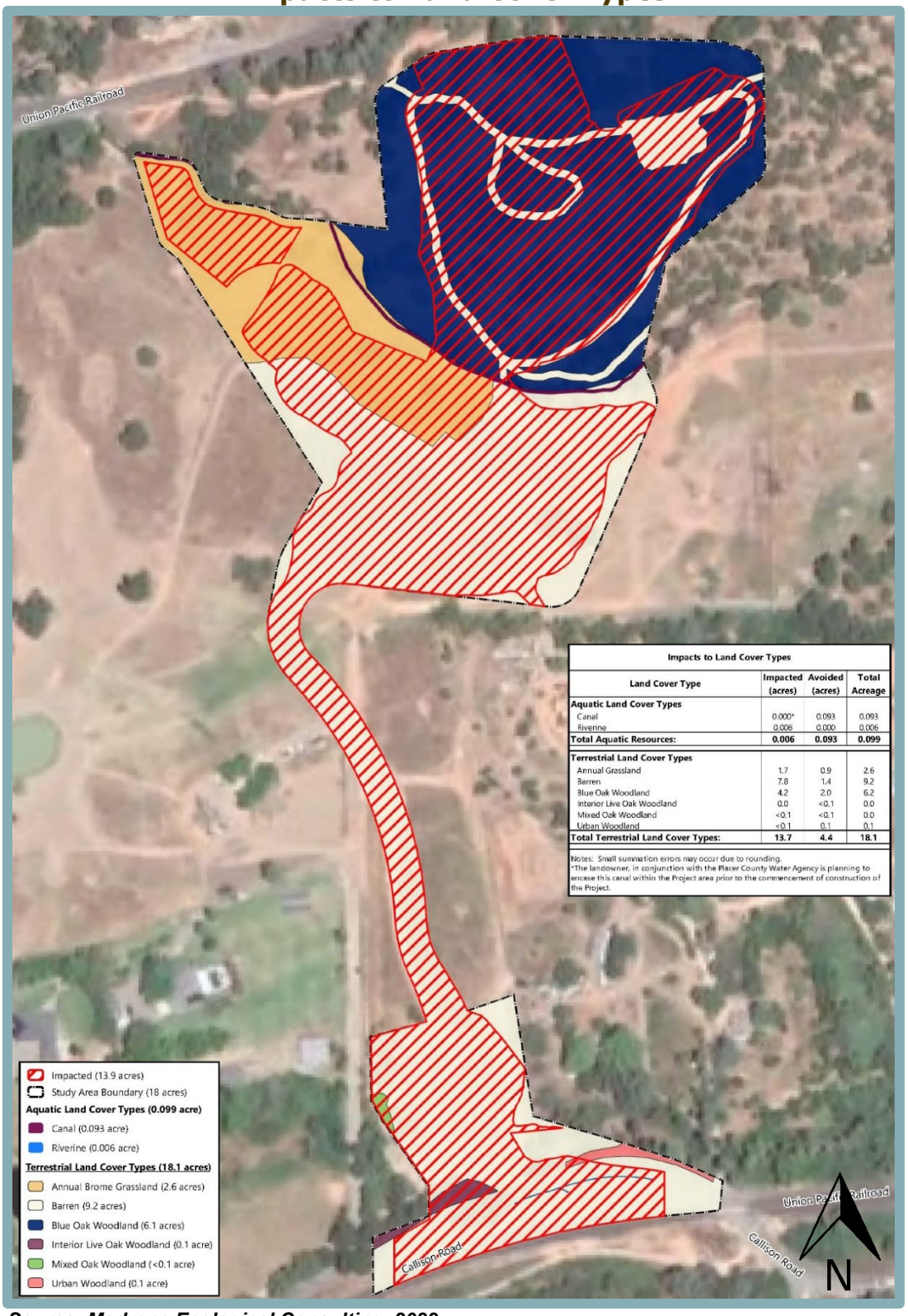
Source: Madrone Ecological Consulting, 2022.

Under the PCCP, mitigation for oak woodland is achieved at a landscape level rather than a tree-by-tree basis. Nevertheless, for informational purposes, the following tree impact data is provided. Of the 331 protected trees present within the project site, a total of 215 protected trees that have a combined DBH of 3,136 inches would be impacted by the project. The remaining 116 protected trees would not be impacted by the project. Of the 215 protected trees to be impacted, 165 have major or extreme structural and/or health problems. The remaining 50 protected trees are in fair or good condition and total 668 inches DBH. Of the 50 protected trees, four are greater than 24 inches in diameter and are considered “significant trees” to be removed. The significant trees to be removed include tree 6963, a 26-inch DBH interior live oak, tree 9354, a 31- inch DBH blue oak, tree 6964, a 27-inch DBH California black oak, and tree 5218, a 24-inch blue oak.

The project site is located within Plan Area A: Foothills of the PCCP and the proposed project is a Covered Activity requiring PCCP Authorization. The project is required to apply for PCCP Authorization and comply with PCCP General Condition 3 for land conversion fee obligations for permanent land conversion.

Development fees would be applied for the proposed project’s vegetation community impacts, in accordance with PCCP guidelines. The vegetation community impacts that would be accounted for would include impacts to the oak woodlands, as well as other natural and semi-natural habitats, such as annual grassland.

Figure 7-5
Impacts to Land Cover Types



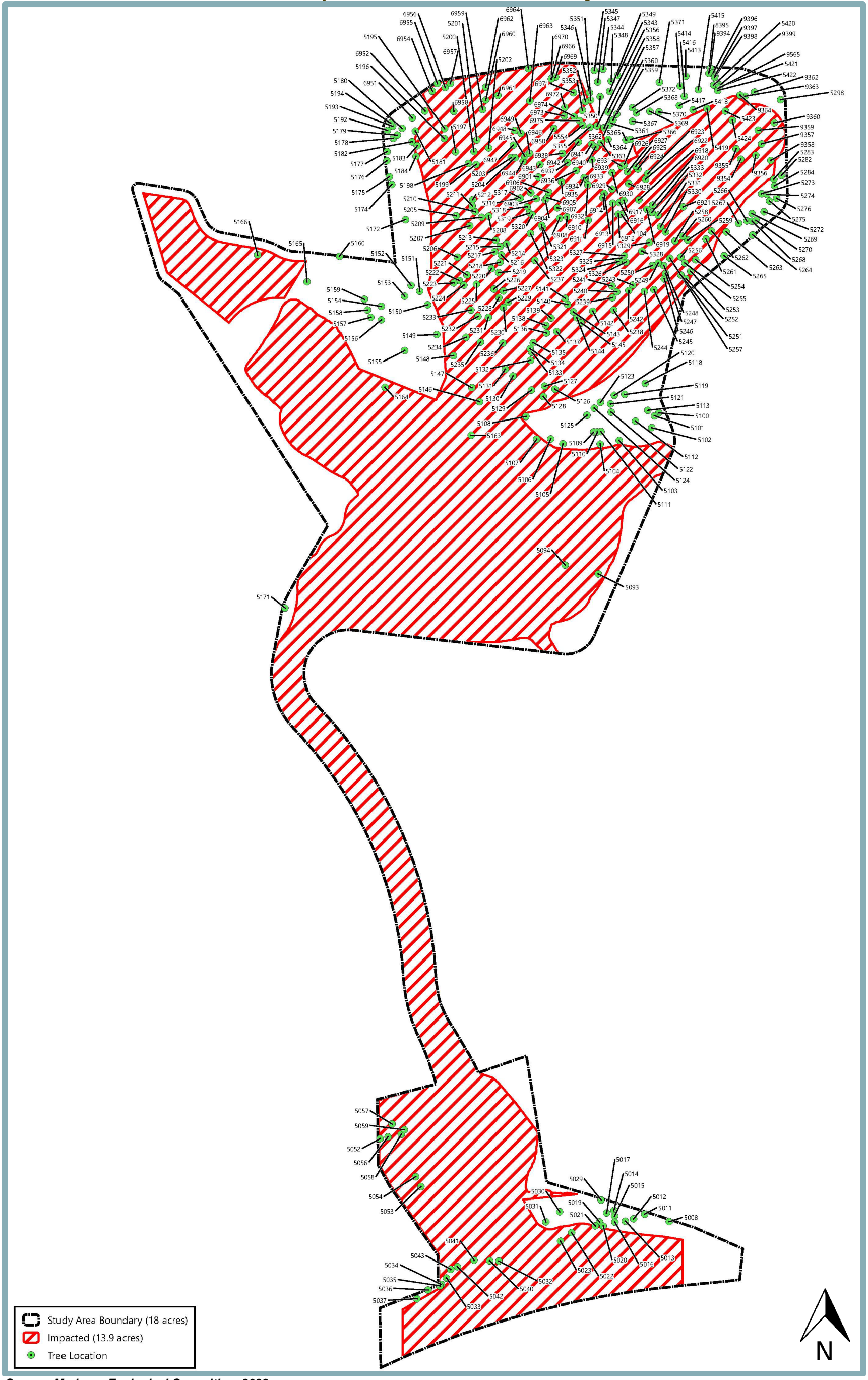
Impacts to Land Cover Types

Land Cover Type	Impacted (acres)	Avoided (acres)	Total Acreage
Aquatic Land Cover Types			
Canal	0.000*	0.093	0.093
Riverine	0.006	0.000	0.006
Total Aquatic Resources:	**0.006**	**0.093**	**0.099**
Terrestrial Land Cover Types			
Annual Grassland	1.7	0.9	2.6
Barren	7.8	1.4	9.2
Blue Oak Woodland	4.2	2.0	6.2
Interior Live Oak Woodland	0.0	<0.1	0.0
Mixed Oak Woodland	<0.1	<0.1	0.0
Urban Woodland	<0.1	0.1	0.1
Total Terrestrial Land Cover Types:	**13.7**	**4.4**	**18.1**

Notes: Small summation errors may occur due to rounding.
*The landowner, in conjunction with the Placer County Water Agency is planning to encase this canal within the Project area prior to the commencement of construction of the Project.

Source: Madrone Ecological Consulting, 2022.

Figure 7-6
Potential Impacts to Trees Within the Project Site



Source: Madrone Ecological Consulting, 2022.

According to the PCCP's Land Conversion Fee Schedule (Table 9-6 of the PCCP), fees applied under Plan Area A: Foothills for "Non-residential project on existing parcel greater than 1.0 acre or on any parcel created by subdivision" are $10,837 for each acre, as well as any applicable special habitat fees. Final fee amounts will be calculated by the PCA at time of PCCP application submittal.

Based on the above, 4.2 acres of blue oak woodland and interior live oak woodland, as well as 1.7 acres of annual brome grassland, are anticipated to be directly impacted by the proposed project within the PCCP Potential Future Growth (PFG) area, the impacts of which would be fully mitigated through compliance with the PCCP. Without compliance with the PCCP, the impact could be considered ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

7-5 *PCCP General Condition 3. Prior to Improvement Plan approval, the project shall pay a land conversion fee or dedicate land in lieu of a fee or a combination thereof for the permanent conversion of approximately 5.9 acres of natural land cover, including 4.2 acres of oak woodland and 1.7 acres of annual brome grassland. If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the amount of land disturbance resulting from the activity.*

7-6 Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed above under Impact 7-5, PCCP development fees would be applied for the proposed project's vegetation community impacts, in accordance with PCCP guidelines. The project site is within Plan Area A: Foothills of the PCCP, which is covered by a comprehensive permit. Avoidance and minimization measures, set forth in Chapter 6 of the PCCP, are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats.

During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees can include Land Conversion fees and Aquatic/Wetland Special Habitat fees. The proposed project would also be required to participate in the PCCP for incidental take coverage and mitigation, if necessary, for effects to waters of the U.S. and State, as well as oak woodlands. Payment of all applicable development fees would ensure the proposed project is in compliance with the provisions of the PCCP. However, without compliance with all applicable provisions of the PCCP, the project would result in a significant impact.

Based on the above, without compliance with all applicable PCCP conditions, the proposed project could conflict with the provisions of an adopted HCP/NCCP. Therefore, a ***significant*** impact could occur.

It is also noted that, prior to the release of the NOP for the proposed project (January 13, 2022), the point at which the environmental baseline for the EIR is established (CEQA Guidelines Section 15125), the applicant conducted agricultural activities on the project site related to the planting of vineyards. The activities included grading, vegetation removal, and installation of a culvert at the property's Callison Road frontage to enable construction of a gravel road providing access to the on-site vineyards. Agricultural-related activities are not covered by the PCCP (see Section 2.7 of PCCP), and as such, the culvert installation was not required to comply with the PCCP at that time. While the biological impact analysis within this chapter is based appropriately on the physical environmental conditions of the project site at the time the NOP was released on January 13, 2022, the County has determined that the prior culvert installation may be required to comply with the PCCP once the Callison Road access/internal project road is converted to urban conditions through paving to serve the proposed winery project. Thus, additional Aquatic/Wetland Special Habitat fees may be required to address on-site disturbance that occurred prior to the establishment of the current CEQA environmental baseline.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

7-6(a) *PCCP General Condition 5. Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, State and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work.*

7-6(b) *Implement Mitigation Measures 7-3(a), 7-3(b), 7-3(e), 7-3(f), and 7-5.*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 20, Statutorily Required Sections, of this EIR.

7-7 Cumulative loss of habitat for special-status species. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The cumulative analysis in this EIR is based upon a summary of projections contained in the HBPCP, in combination with buildout of the nearby Bickford Ranch Specific Plan (BRSP). The BRSP is a County-approved master planned community anticipated for implementation over three phases on 1,942.5 acres located west of project site. At buildout, the BRSP will generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. As such, the County-approved BRSP would result in the loss of habitat for special-status species in the project region. Additionally, the HBPCP includes an area of approximately 25 square miles located west and south of the project site. Buildout of the HBPCP area would similarly result in the loss of habitat for special-status species in the project region, albeit, at a reduced scale relative to the BRSP area.

As discussed above, the project site contains a variety of vegetation communities and land cover types, including blue oak woodland, annual brome grassland, interior live oak woodland, mixed oak woodland, urban oak woodland, and barren land cover. In addition, the project site contains a small number of aquatic resources, including less than an acre each of the Antelope Canal and a roadside ditch. Development of the proposed project would result in potential impacts to portions of the foregoing areas. Potential impacts are detailed in Table 7-5 and Table 7-6, above. As discussed throughout this chapter, the on-site vegetation provides limited habitat for various special-status species listed in Table 7-3.

This chapter provides a wide range of mitigation to minimize potential adverse effects to habitat for special-status species. Mitigation measures have been set forth in this chapter to ensure that the proposed project complies with all applicable PCCP avoidance and minimization measures (AMMs). It should be noted that while the proposed project would result in the loss of a portion of the existing on-site habitat, 4.4 acres of on-site terrestrial land covers and 0.093-acre of on-site aquatic resources would be avoided, consistent with Vegetation Policy 2 of the HBPCP Natural Resources Management Element. Such avoidance would ensure that portions of the existing habitat within the project site remain undisturbed, following implementation of the proposed project.

The proposed project would not include the conversion of any lands not previously identified for development. Also notable is the PCCP's identification of the project site as an area of Foothill Potential Future Growth Area (A3) (PCCP Volume 1, pg. 2-37), as well as the entirety of the HBPCP area and BRSP.[10] The PCCP Environmental

[10] The BRSP EIR included a total of 19 mitigation measures to address potentially significant impacts to biological resources. The Bickford Ranch Tree Mitigation Plan has already been discussed above. In addition, Mitigation Measure B-E of the BRSP EIR requires implementation of a Wetland Preservation and Impact Plan that will create 8.49 acres of seasonal wetland, emergent marsh, and riparian habitats for a mitigation ratio of more than 3:1. An additional 15.07 acres of open water will be created within the BRSP's seven constructed lakes, and 3.8 acres of emergent marsh wetland will be constructed along the fringes of the lakes.

Impact Report/Environmental Impact Statement (EIR/EIS) concluded that impacts to biological resources related to future growth identified in the PCCP would be less than significant with implementation of the Plan's conservation strategy.[11] To ensure the preservation of special-status plant and wildlife species, sensitive habitats, and State and federally protected wetlands, the PCCP includes the establishment of a Reserve Acquisition Area (RAA), an area designated in the PCCP within which a connected Reserve System will be assembled. The conservation strategy would establish most of the Reserve System in the RAA. The PCA, created to implement the HCP/NCCP and the CARP, will acquire approximately 47,300 acres for natural and semi-natural community protection and restoration over the 50-year permit term for the HCP/NCCP.

As further discussed in Chapter 20 of this EIR, CEQA Guidelines Section 15064(h)(5), states, "[…] the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

In addition, the courts have explicitly rejected the notion that a finding of significance is required simply because a proposed project would result in a net loss of habitat. "[M]itigation need not account for every square foot of impacted habitat to be adequate. What matters is that the unmitigated impact is no longer significant," (*Save Panoche Valley v. San Benito County* [2013] 217 Cal.App.4th 503, 528, quoting *Banning Ranch Conservancy v. City of Newport Beach* [2012] 211 Cal.App.4th 1209, 1233).

The above discussion provides substantial evidence that, while the combined effects on biological resources resulting from approved/planned development throughout the BRSP and HBPCP areas could be considered significant, the proposed project's incremental contribution to the significant cumulative effect would be reduced with implementation of the mitigation measures required in this EIR.

Based on the above, although cumulative buildout of the BRSP and HBPCP areas could result in a significant cumulative impact related to the loss of special-status species habitat, the proposed project's contribution to the significant impact, through incorporation of the mitigation measures set forth herein, would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

[11] Placer County. *Placer County Conservation Program Final Environmental Impact Statement/Environmental Impact Report* [pg. 4.3-47]. May 2020.

8. Cultural Resources

8. CULTURAL RESOURCES

8.1 INTRODUCTION

The Cultural Resources chapter of the EIR addresses known and unknown historic and prehistoric cultural resources in the vicinity of the project area. Cultural resources can be categorized into prehistoric or historic resources. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. The chapter summarizes the existing setting with respect to cultural resources, identifies thresholds of significance, evaluates project impacts to such resources, and sets forth mitigation measures. Information presented in the chapter is primarily drawn from the Cultural Resources Study prepared by LSA Associates, Inc. (LSA) (see Appendix G),[1] as well as the Placer County General Plan,[2] the General Plan EIR,[3] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[4]

It should be noted that potential impacts to tribal cultural resources are discussed and evaluated in Chapter 17, Tribal Cultural Resources, of this EIR.

8.2 EXISTING ENVIRONMENTAL SETTING

Placer County contains a rich cultural resource heritage that includes archeological and historical sites and resources. Given the rich heritage of the area, many archeological and historical sites and resources remain undiscovered. According to the Placer County General Plan EIR, as of November 1991, a total of 1,235 archeological sites were recorded in Placer County. Of the 634 records reviewed, 456 represented prehistoric archeological sites; 143 represented historical archeological sites; and 35 represented archeological sites with prehistoric and historical components.

The following sections provide further details regarding the precontact overview, ethnographic overview, historic overview of the project area, and project site history and current uses. In addition, a description of any identified cultural resources associated with the project site is provided below.

Precontact Overview

The Sacramento Valley area was probably settled by native Californians between 10,000 and 4000 B.C. The Paleo-Archaic-Emergent cultural sequence developed by David Fredrickson at the University of California, Davis, Department of Anthropology, is commonly used to interpret the prehistoric occupation of Central California. The sequence is broken into the following three broad periods:

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1 LSA Associates, Inc. *Cultural Resources Study – 7615 Callison Road Winery Project (BEM-08) Penryn, Placer County, California.* April 2021.
2 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

- The Paleoindian period (10,000 to 6000 B.C.) began with the first entry of people into California. Such people probably subsisted mainly on big game, and to a lesser extent, on plant foods, with few or no trade networks. Current research, however, indicates more plant processing, trading, and sedentism occurred in the period than previously thought;
- The Archaic period (Lower Archaic, 6000 to 3000 B.C.; Middle Archaic, 3000 to 1000 B.C.; and Upper Archaic, 1000 B.C. to 500 A.D.) is characterized by increased use of plant foods, elaboration of burial and grave goods, and increasingly complex trade networks; and
- The Emergent period (500 to 1800 A.D.) is marked by the introduction of the bow and arrow, the ascendance of wealth-linked social status, and the elaboration and expansion of trade networks, signified in part by the appearance of clam disk bead money.

Human populations during the Paleoindian period in the project vicinity were low and probably consisted of small groups moving frequently in order to exploit plant and animal resources. The Central Valley has had many population movements and waves of cultural influence from neighboring regions, with the valley probably first occupied at the end of the Pleistocene epoch, as evidenced by core and flake tools. Hokan speakers may have been the early occupants of the Central Valley, but were eventually displaced by migrating Penutian speakers (ancestral Nisenan) coming from areas outside California. The Penutian speakers most likely entered the Central Valley in several minor waves, slowly replacing the original Hokan speakers and causing the latter population to migrate to the periphery of the Central Valley. By about 300 to 500 A.D., the Penutian settlement of the Central Valley was complete.

Small projectile points provide evidence of the presence of ancestral Nisenan culture around 700 A.D. in western Placer County. A highly developed exchange network with shell bead currency appeared after 1500 A.D. in the form of exotic obsidian from the eastern Sierra and the North Coast Ranges, coastal shells, and distinctive projectile points showing up 100 miles or more from their source.

Ethnographic Overview

The project site is located within the ethnographic territory of the Nisenan (also known as the Southern Maidu). The Nisenan are part of the California Penutian linguistic family, which is further divided into four subfamilies: Wintuan, Maiduan, Yokutsan, and Utian. The Nisenan belong to the Maiduan subfamily, along with the Maidu and Konkow. The territory of the Nisenan, which includes the drainage of the American River, extended from the crest of the Sierra Nevada in the east to the Sacramento River in the west; as far south as the Cosumnes River; and north to the divide of the North Fork of the Yuba River and Middle Fork of the Feather River. For a more detailed ethnographic overview of the project area, see Chapter 17, Tribal Cultural Resources, of this EIR.

Historic Overview

Spanish explorations of California were driven by religious pursuits. Determined to reduce what was considered heathenism in the world, the Spanish crown set out to convert as many Native Americans as possible to Christianity. From 1769 to 1823, 21 missions were established along the California coast that were intended to convert and civilize the California indigenous population. Expeditions of California's Central Valley were limited to the retrieval of neophytes. Only five documented expeditions reported to have seen the Sacramento Delta before 1800. Spanish explorer Gabriel Moraga first explored the Sacramento region and named the area sometime before 1808.

When Mexico gained independence from Spain in 1821, the Mexican government gained control of California and began in 1834 to secularize the missions. Mission lands were meted out in the form of ranchos as rewards to political supporters and/or prestigious Mexican citizens, or *Californios*. Following the Mexican-American War and as part of the Treaty of Guadalupe Hidalgo, Mexico ceded Upper California and New Mexico to the U.S. As a condition of the treaty, many previously instated land grants were honored by the U.S. government. In 1848, the discovery of gold on the South Fork American River in Coloma brought an influx of settlers into California. Early pioneers passed through the area on their way east into the foothill mining camps. Placer County was established in 1851 from parts of Sutter and Yuba counties, three years after the discovery of gold in California. Placer mining was the principal method of mining for gold in the County, and this Spanish term was given to the newly formed County.

Penryn was named by Griffith Griffith, who opened a granite quarry in the area and constructed the Penryn Granite Works office in 1864, the same year the Central Pacific Railroad was constructed through the area. Griffith named the town after Penrhyn, Wales. Griffith's quarry grew to include polishing mills and other improvements, and by 1872, employed around 200 workers. The quarry became a major producer of granite during this time, supplying stone for some of California's early historic buildings, including the State Capitol, the county courthouse in Stockton, and the U.S. Mint in San Francisco.

The fruit industry did not fully take off in Penryn as it did in the Sacramento Valley until 1886, when the Penryn Fruit Company was incorporated. The company sent mainly peaches, plums, cherries, and pears to eastern markets. The flumes and ditches built for transporting water for mining purposes changed the technological implications of water as a natural resource in the region. As the gold supply dissipated, many miners turned to farming as an economic pursuit. In 1890, the Citrus Colony in Penryn was organized, and colonists from England were sold portions of land to tend upon arrival. The fruit colonies did not last long, however, due to the Panic of 1893, which financially affected the fruit industry and led colonists to seek work in other fields.

Project Site History and Current Uses

The project site is located on the eastern outskirts of the Sacramento Valley, at the valley's interface with the base of the western slopes of the Sierra Nevada. The Sacramento Valley forms the northern portion of California's Great Central Valley, which is characterized by an alluvial valley floor. As such, the Sacramento Valley is geologically known as a structural trough that has consistently collected redeposited sediment eroded from surrounding mountain ranges since the Jurassic Period (160 million years before present [B.P.]). The project site generally consists of low rolling hills with an average elevation of 800 feet above mean sea level and elevation increases towards the northeast corner of the project site, with average slopes of 13 percent incrementally increasing to a maximum slope of 40 percent.

The project site's landscape is comprised of open, mostly undeveloped land that has been used for cattle grazing and provides access to the Antelope Canal, which is maintained by the Placer County Water Agency (PCWA). Antelope Creek is the closest water source to the site, located to the east, near Callison Road. Native vegetation in the project region consists of California grasslands with central oak woodland features that are still observable today. The project site includes interior live oak, valley oak and gray pines, as well as various grasses, poppies, and lupines.

As detailed in the Method of Analysis subsection, below, LSA conducted a pedestrian survey of the preliminary Study Area on July 14, 2020. According to the field survey, most of the Study Area has been previously disturbed as part of installation of the Antelope Canal, grading of associated access roads, underground utilities, previous vegetation removal, and pastoral activities. In addition to the Study Area's current uses associated with the Antelope Canal, a small area in the southeast corner of Assessor's Parcel Number (APN) 031-220-061 has been set aside for beekeeping. Near the beekeeping area, several charcoal bits were observed on the ground surface during the field survey, indicating a recent burn occurred. Flattened areas did not appear natural, but were graded or filled with imported sand that was not observed on-site in natural-appearing areas.

Additionally, the west side of APNs 031-220-061 and 032-124-080 appeared to have been disturbed by removal of invasive Himalayan blackberry through heavy machinery (based on track vehicle impressions) and/or burned (based on charcoal presence). Large granite outcroppings were observed in groups throughout the property and were likely mechanically moved based upon scrapes identified on large boulders and track vehicle impressions. The outcroppings were inspected for cultural modification, but modifications were not observed. Ground squirrel burrows were observed throughout the property and inspected for any subsurface soil changes that could indicate a buried cultural resources deposit. Soil changes were not observed.

Known Cultural Resources

On July 2, 2020, LSA submitted a request for a records search (PLA-20-76) of a 77.99-acre preliminary Study Area and a 0.25-mile radius to the staff at the North Central Information Center (NCIC) at California State University, Sacramento, the boundaries of which encompassed the 17.96-acre project site (see Figure 8-1 and Figure 8-2). Further details on the records search are provided in the Method of Analysis subsection below. The records search identified 49 potential resources within 0.25-mile of the preliminary Study Area, three of which are either within or immediately adjacent to the project site. Table 8-1 provides a summary of the three resources, two of which have been previously evaluated. The resources are discussed further below.[5]

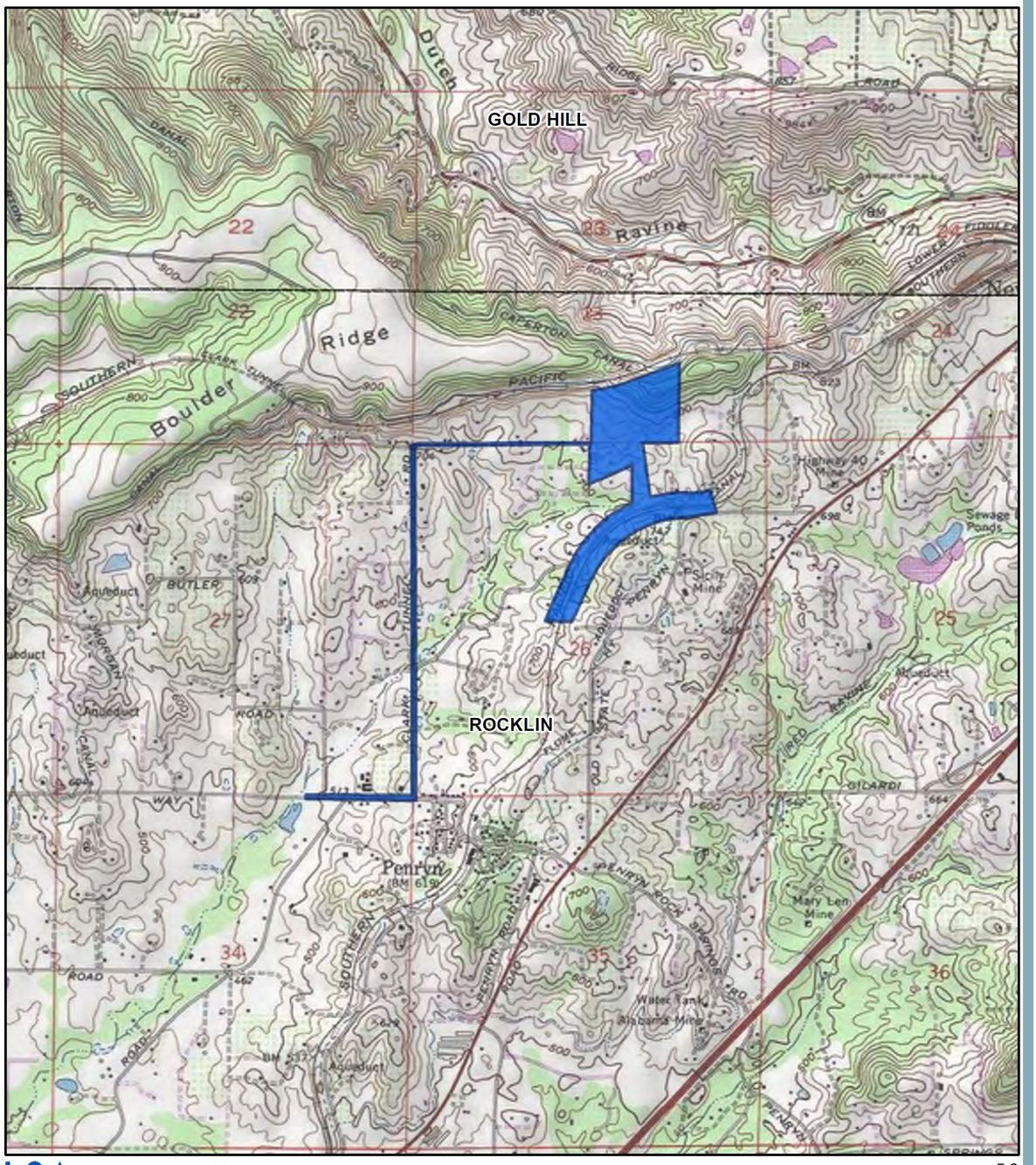
Antelope Canal (P-31-000967/CA-PLA-000844H)

The Antelope Canal was created in the 1850s as a short ditch measuring only a few miles in length and drawing water from a minor ravine. The canal was an early mining ditch that served small diggings in ravines that are not well documented in gold rush literature as being important mining locations. The canal is one of numerous small mining canals in the foothills of similar age, length, and design that were later converted to irrigation and domestic service.

An early owner of the Antelope Canal, Joseph Goolsby, was a stock raiser and farmer in the Clover Valley. J. Parker Whitney, a significant local personage who was the owner of the Spring Valley Ranch near the City of Rocklin and developer of Placer County Citrus Colony, was responsible for the enlargement of what is now considered the Antelope Canal; however, Whitney did not construct the original canal, nor was he the owner.

[5] LSA Associates, Inc. *Cultural Resources Study – 7615 Callison Road Winery Project (BEM-08) Penryn, Placer County, California*. [pgs. 14 to 15]. April 2021.

Figure 8-1
Study Area



LSA

LEGEND

Study Area - (77.99 ac)

E 2

0 1000 2000
FEET

Winery Project at 7615 Callison Road (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Vicinity

SOURCE: USGS 7.5-minute topographic quadrangle of Rocklin, CA (1967, ed. 1981)

I:\BNM2001\GIS\Reports\Fig2_Proj_Vic.mxd (6/26/2020)

Figure 8-2
Project Site

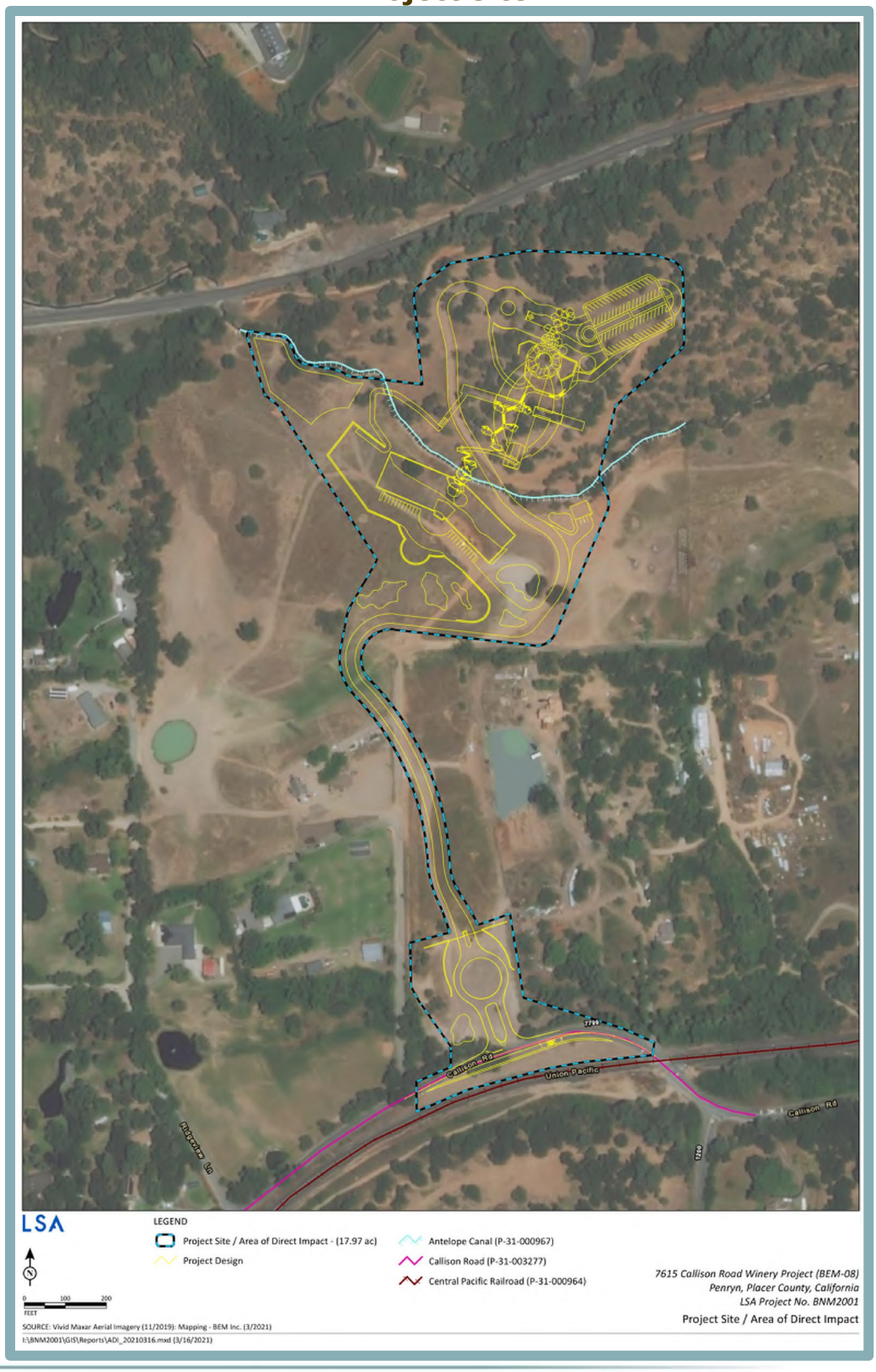


Table 8-1
Cultural Resources Within the Project Site

Resource Number/Trinomial	Resource Summary	Location Within the Project Site
P-31-000964/CA-PLA-000841H	A historic-period resource consisting of the original Central Pacific Transcontinental Railroad (later the Southern Pacific Railroad, and currently the Union Pacific Railroad [UPRR]), which has been designated State Historic Landmark No. 780.	Southern portion of the project site, along the south side of Callison Road.
P-31-000967/CA-PLA-000844H	A historic-period resource consisting of the Antelope Canal, an earthen structure constructed in 1852 averaging approximately three meters wide and lined with gunnite. The resource is currently managed by the PCWA.	Crosses the northeast corner of the project site.
P-31-003277	A historic-period segment of Callison Road.	Within the UPRR right-of-way (ROW) in the southern portion of the project site. The proposed project includes roadway improvements to tie the proposed development into Callison Road.

Source: North Central Information Center, File No. PLA-20-76, 2020.

Callison Road (P-31-003277)

Portions of Callison Road appear on maps within the project area as early as 1855 and were incorporated into the main roadway connecting the communities of Newcastle and Penryn in the 1880s. In 1909, the Newcastle-Penryn segment of Callison Road became part of Legislative Route No. 17 and was incorporated into the Lincoln Highway in 1913, during a time when many existing county roads were incorporated into Lincoln Highway to form an interconnected system of local roadways.

The segment of Callison Road within the project site is a typical rural, two-lane conventional road without any engineering features, such as bridges or grade separations.

Central Pacific Transcontinental Railroad (UPRR) (P-31-000964/CA-PLA-000841H)

The original Central Pacific Transcontinental Railroad (later the Southern Pacific Railroad and currently the UPRR) has been designated State Historic Landmark No. 780. The landmark is an approximately 2,800-foot-long segment of abandoned railroad grade that extends in an east-to-west direction. The current width of the segment is 10 to 12 feet, which is likely not the original width, as the railroad segment has been bladed into a roadway previously. The segment is located in the southern portion of the project site, along the south side of Callison Road.

Project Site Archaeological Sensitivity

Assessing the potential for buried archaeological deposits in and adjacent to the project site requires an understanding of landform age and overlying soils. Fundamentally, an inverse relationship exists between landform age and the potential for buried archaeological deposits.

Some landforms predate human occupation of the region (e.g., Pleistocene alluvial fan deposits), and, as such, archaeological deposits on such landforms, if present, would be located at or near the surface. In contrast, landforms that were formed during the Holocene epoch (circa 11,700 years ago to the present) have a potential for containing buried surfaces (paleosols) that would have been available for human habitation during prehistory. Paleosols associated with Holocene landforms, therefore, may contain buried archaeological deposits.

The landform upon which the site is situated pre-dates the known time period for human occupation in the region, which occurred approximately 12,000 years ago. Geologically, the project site is located on a pre-Pleistocene-aged (greater than 1.9 million years old) landform. Three soil types are identified within the project site, including caperton-rock outcrop complex, caperton-andregg coarse sandy loam, and andregg coarse sandy loam. Caperton series soils are centrally located in the main portion of the project site and composed of weathered granodiorite and quartz diorite, which form shallow, excessively draining soil. The soils are typically associated with two to 50 percent slopes. Caperton-andregg coarse sandy loam is observed on the western portion of the project site and is associated with two to 15 percent slopes. The soil is composed of 50 percent caperton and 30 percent andregg. Andregg soils also located to the east and north of the project site are formed from weathered granodiorite and create moderately deep, well-drained soil. The northern portion, associated with higher elevation, is extremely rocky and the soil type in this location is particularly associated with 30 to 50 percent slopes. The eastern portion of the project site does not have the same rocky characteristics and is associated with 15 to 30 percent slopes. The soils presented above are consistent with the landform age from which they originate.

Based on the above, archaeological site sensitivity would be greater closer to the surface.

8.3 REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The following section contains a summary of basic federal and State laws governing preservation of historic and archaeological resources of national, regional, State, and local significance.

Federal Regulations

The following are the federal environmental laws and policies relevant to cultural resources.

Section 106 for the National Historical Preservation Act of 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historical Preservation Act (NHPA) of 1966. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in Title 36 of the Code of Federal Regulations (CFR), Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not

require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

National Register of Historic Places

The NRHP is the nation's master inventory of known historic resources. The NRHP includes listings of resources, including: buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. Resources over 50 years of age are eligible to be listed on the NRHP. However, properties under 50 years of age that are of exceptional significance or are contributors to a district could also be included on the NRHP. Four criteria are used to determine if a potential resource may be considered significant and eligible for listing on the NRHP. The criteria include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history; or
B. Are associated with the lives of persons significant in our past; or
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. Have yielded or may likely yield information important in prehistory or history.

A resource can be individually eligible for listing on the NRHP under any of the above four criteria, or can be listed as contributing to a group of resources that are listed on the NRHP.

A resource can be considered significant in American history, architecture, archaeology, engineering, or culture. Once a resource has been identified as significant and potentially eligible for the NRHP, the resource's historic integrity must be evaluated. Integrity is a function of seven factors: location, design, setting, materials, workmanship, feeling, and association. The factors closely relate to the resource's significance and must be intact for NRHP eligibility.

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. The lead federal agency makes the determination of eligibility based on the results of the test program and seeks concurrence from the State Historic Preservation Officer (SHPO).

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

State Regulations

The following are the State environmental laws and policies relevant to cultural resources.

California Environmental Quality Act and California Register of Historic Places

State historic preservation regulations affecting the proposed project include the statutes and guidelines contained in CEQA (Public Resources Code [PRC] Sections 21083.2 and 21084.1 and Sections 15064.5 and 15126.4[b] of the CEQA Guidelines). CEQA requires lead agencies to consider the potential effects of a project on historic resources and unique archaeological resources. A "historic resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant (PRC Section 5020.1). Under Section 15064.5 of the CEQA Guidelines, a resource is considered "historically significant" if one or more of the following California Register of Historic Resources (CRHR) criteria have been met:

1) The resource is associated with events that have made a significant contribution to the broad patterns of California history;
2) The resource is associated with the lives of important persons from our past;
3) The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
4) The resource has yielded, or may be likely to yield, important information in prehistory or history.

In addition, the resource must retain integrity. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

CEQA requires preparation of an EIR if a proposed project would cause a "substantial adverse change" in the significance of a historical resource. A "substantial adverse change" would occur if a proposed project would result in physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

In addition to historically significant resources, which can include archeological resources that meet the criteria listed above, CEQA also requires consideration of "unique archaeological resources." If a site meets the definition of a unique archaeological resource, the site must be treated in accordance with the provisions of PRC Section 21083.2. Under PRC Section 20183.2(g), an archaeological resource is considered "unique" if it:

1) Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
2) Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
3) Has a special kind or particular quality such as oldest, best example, largest, or last surviving example of its kind;
4) Is at least 100 years old and possesses substantial stratigraphic integrity; or
5) Involves important research questions that can be answered only with archaeological methods.

CEQA also includes specific guidance regarding the accidental discovery of human remains. Specifically, CEQA Guidelines Section 15064.5(e) requires that if human remains are uncovered, excavation activities must be stopped and the county coroner be contacted. If the county coroner determines that the remains are Native American, the coroner must contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC identifies the most likely descendant,



and that individual or individuals can make recommendations for treatment of the human remains under the procedures set forth in Section 15064.5 of the CEQA Guidelines.

The SHPO maintains the CRHR. Properties that are listed on the NRHP are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Local Regulations

The following are Placer County's environmental policies that are intended to protect cultural resources by mitigating the potential impacts of new development in areas containing important archaeological or historic resources.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to cultural resources are applicable to the proposed project.

Cultural Resources

Goal 5.D To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policy 5.D.2 The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

Policy 5.D.3 The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

Policy 5.D.4 The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County's paleontological and archaeological resources.

Policy 5.D.5 The County shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.

Policy 5.D.6 The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a County-wide cultural

resource data base, to be maintained by the Division of Museums.

Policy 5.D.7 The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Policy 5.D.8 The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

Policy 5.D.9 The County shall use the State Historic Building Code to encourage the preservation of historic structures.

Policy 5.D.10 The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

Policy 5.D.11 The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.

Policy 5.D.12 The County shall consider acquisition programs (i.e. Placer Legacy Open Space and Agricultural Conservation Program) as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, the Native American community, and local land trusts.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the Natural Resources Management Element of the HBPCP related to cultural resources are applicable to the proposed project.

Cultural and Paleontological Resources

Goal b Assist the citizens of the plan area in becoming active guardians of their community's cultural resources. Explore incentive programs to encourage the preservation and enhancement of cultural resources.

Goal c — Coordinate with and cooperate with the surrounding jurisdictions for the mutual goal of preserving the cultural heritage of Placer County. Encourage neighboring communities to undertake cultural resources inventory to create a complete record of cultural resources for Placer County.

Policy a — Identify and protect from damage, destruction and abuse, Placer County's important historical, archaeological, and cultural sites and their contributing environment (i.e. setting). When possible, incorporate these resources, particularly historical vegetation or vista points, into Open Space areas.

Policy c — Require site-specific studies as part of the environmental review process, for paleontological, prehistoric, historical and natural elements in all instances where land development or property demolition has the potential to have a detrimental impact on a possibly significant cultural resource or historic structure (i.e. buildings aged 45 years or older). Whenever possible, projects should be planned to avoid adverse impacts to cultural resources. Avoidance strategies are preferred over mitigation of the impacts.

Policy d — Develop an effective program of landmark designation, utilizing the standards of the existing state and national programs, and develop local criteria to assure that significant cultural resources are recognized and protected. All documentation of cultural resources shall conform to the standards and formats recommended by the California Office of Historic Preservation

Policy e — Develop an effective educational program which stresses the importance of the County's cultural resources, and purports ways to maintain the integrity of these resources. Encourage the owners of both identified and unidentified cultural resources to perceive these resources as assets rather than liabilities.

Policy f — Develop a master plan for the acquisition and management of cultural and natural resources that are either very significant to the region, or are in imminent danger of destruction.

Policy g — Structures of historic or architectural significance shall be identified and documented, and efforts shall be made for their preservation.

Policy h — Use existing and promote proposed legislation for the identification and protection of cultural resources.

Policy j — Protect portions of Taylor Road from the east entrance of the Newcastle tunnel to Callison Road, and Sisley Road from Callison Road to Taylor Road, as historical resources that should be maintained in their historic concrete fabric. (Board of Supervisors' Resolution #93-289)

8.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, an impact related to cultural resources is considered significant if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- Disturb any human remains, including those interred outside of dedicated cemeteries;
- Have the potential to cause a physical change which would affect unique ethnic cultural values; or
- Restrict existing religious or sacred uses within the potential impact area.

Method of Analysis

Preparation of the Cultural Resources Study included a records search by staff at the NCIC at California State University, Sacramento, of the 77.99-acre Study Area and a 0.25-mile radius, the boundaries of which encompassed the 17.96-acre project site. The larger preliminary Study Area was also used as part of a NAHC Sacred Lands File search (see Chapter 17, Tribal Cultural Resources, of this EIR) and consultation with the local historical society. The NCIC, an affiliate of the State of California Office of Historic Preservation, is the official State repository of cultural resource records and reports for Placer County. The records search included a review of the following federal and State inventories:

- California Inventory of Historic Resources;
- Five Views: An Ethnic Historic Site Survey for California;
- California Points of Historical Interest;
- California Historical Landmarks;
- Archaeological Determinations of Eligibility; and
- Built Environment Resources Directory (BERD).

Additional methods of analysis, including a literature and map review, an inquiry to the Placer County Historical Society, and a field survey, are described in further detail below.

Literature and Map Review

LSA conducted research to obtain archaeological, ethnographic, historical, and environmental information about the preliminary Study Area and surrounding area. The literature reviewed included publications, maps, local historical directories, and websites for information about the project site and the surrounding vicinity. The maps reviewed by LSA included the U.S. Geological Survey (USGS) 7.5-minute Rocklin topographic quadrangle of 1954 and 1967. Aerial images reviewed included photographs of the Study Area dated to 1952, 1966, 1993, 1998, 2002, 2005, 2009, 2010, 2012, 2014, and 2016.



Placer County Historical Society

On July 16, 2020, LSA sent an email describing the proposed project, with maps depicting the preliminary Study Area, to the Placer County Historical Society asking for any information or concerns they may have regarding the proposed project. A response was not received. A copy of the correspondence is provided as an appendix to the Cultural Resources Study.

Field Survey Methods

LSA conducted a pedestrian survey of the preliminary Study Area on July 14, 2020. Overall visibility of the project site was approximately 85 percent, limited only by low-growing grasses. A small area in the southeast corner of APN 031-220-061 was set aside for beekeeping and was surveyed from a distance, with the ground surface exposed and easily viewable. Large granite outcroppings were inspected for cultural modification. In addition, ground squirrel burrows were observed throughout the property and inspected for any subsurface soil changes that could indicate a buried cultural resources deposit.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

8-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Based on the analysis below, the impact is *less than significant*.

Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. As previously noted above, cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

As detailed above in Table 8-1, two known resources were identified within the project site and a third potential historic-period cultural resource was identified adjacent to the site. The two resources within the site, a segment of Antelope Canal that crosses the northeast corner of the site (P-31-000967/CA-PLA-000844H) and a portion of Callison Road in the southern portion of the site within the railroad ROW (P-31-003277), were evaluated as part of previous analyses, the findings of which are included as an appendix to the Cultural Resources Survey.

According to the previous evaluation, neither resource is eligible for listing pursuant to NRHP and CRHR criteria. For eligibility under NRHP Criterion A/CRHR Criterion 1, a resource must be associated with one or more event or historic theme of importance. While water conveyance systems, like other public works facilities, are inherently important to the communities they serve due to the essential infrastructure they provide for community development, the Antelope Canal is not associated with specific

events or broad patterns within history, as the canal was not significant in the context of the history of water engineering or unusually important to the development of the mining industry or to the irrigated agricultural development of the County. Similarly, the segment of Callison Road within the project site does not retain a high degree of integrity as a highway engineering feature of the pre-1928 period, nor does the road retain integrity of setting, feeling, and/or association to the road's period of significance, as the road is a typical rural, two-lane conventional road without any engineering features, such as bridges or grade separations. Thus, both resources were previously determined not to meet NRHP Criterion A/CRHR Criterion 1.

Under NRHP Criterion B and CRHR Criterion 2, eligibility would apply only to cultural resources associated with individuals whose specific contributions to history can be identified and documented as significant in our past. With respect to the Antelope Canal, Goolsby does not appear to have made a significant contribution to agricultural development in the County, and Whitney did not construct the original canal, nor was he the owner. History records do not indicate that the Antelope Canal is significantly associated with any other specific persons or to the history of the region, County, or State. With regard to Callison Road, previous research did not reveal information suggesting that the construction or design of the road was associated with individuals of whom the road would be considered significant as a work of a master. Thus, both resources were previously determined not to meet NRHP Criterion B/CRHR Criterion 2.

Under NRHP Criterion C and CRHR Criterion 3, resources could be eligible for listing on the CRHR or NRHP if the resources illustrate important concepts in design and planning, if the landscape reflects an important historical trend, is distinguished in design or layout, and is the result of skilled craftsmanship. With respect to Antelope Canal, the construction or engineering of the canal did not require a unique or revolutionary engineering technique that might make the canal eligible under such criteria. As discussed above, the construction or design of Callison Road does not indicate the roadway was associated with individuals of whom the road would be considered significant as a work of a master. Furthermore, the road is not a distinctive example of a type, period, or method of construction. Thus, both resources were previously determined not to meet NRHP Criterion C/CRHR Criterion 3.

Finally, to be eligible under NRHP Criterion D or CRHR Criterion 4, a resource must have yielded or have the potential to yield important information. The Antelope Canal, like many canals in the foothills, is well documented and is not a principal source of important information, in this regard. As discussed, Callison Road is a two-lane conventional road without any engineering features, such as bridges or grade separations. Such types of roads are well documented and not principal sources of important information. Thus, both resources were previously determined not to meet NRHP Criterion D/CRHR Criterion 4.

Of the three resources identified in Table 8-1, only the original Central Pacific Transcontinental Railroad (P-31-000964/CA-PLA-000841H) has potential to qualify as a historic-period cultural resource. The Central Pacific Transcontinental Railroad, now the UPRR, has been designated State Historic Landmark No. 780 and is located parallel to the southern boundary of the project site. Because the railroad is a California historical landmark, P-31-000964/CA-PLA-000841H meets the definition of a historical

resource under CEQA. However, while a portion of the proposed project would be developed within the UPRR ROW, the project would not impact the historical resource, because substantial changes to the UPRR tracks are not proposed as part of the project. Work within the UPRR ROW would be limited to improvements to Callison Road. As such, the proposed project would not cause a substantial adverse change in the significance of the railroad.

Based on the above, the portions of Antelope Canal and Callison Road within the project site are not eligible under NRHP and CRHR criteria, and the proposed project's work within the UPRR ROW would be limited to improvements to Callison Road. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

8-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines Section 15064.5. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Although the potential for encountering previously unidentified buried archaeological resources within the project site is low, such possibility cannot be discounted, as the proposed project would include ground-disturbing activities such as excavation associated with construction of the octagon building and wine cave, as well as new building foundations and trenching for new utility lines. According to the Cultural Resources Study's review of literature, local ethnographic settlement and subsistence patterns, and history of the Study Area, the project site is located in an area sensitive for prehistoric and historic-era archaeological resources, such as resources associated with the ancestral Nisenan culture, whose territory encompassed the project site, as well as resources associated with Spanish exploration of the region.

Although known archaeological resources have not been recorded within the project site, given the sensitivity of the project site, unknown archaeological resources could exist in the project vicinity beneath the ground surface and have the potential to be uncovered during ground-disturbing activities at the project site. In the event that project ground-disturbing activities encounter such resources, a significant impact could occur.

Based on the above, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5. Therefore, the project could result in a ***significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

8-2(a) *Prior to initiation of ground-disturbing activities, a qualified archaeologist shall conduct a short awareness training session for all construction workers and supervisory personnel. The course shall explain the importance of, and legal basis for, the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event cultural resources or human remains/burials are uncovered during construction activities, including work curtailment or redirection and to immediately contact their supervisor and the archaeological monitor. The worker education session shall include visuals of artifacts (prehistoric and historic) that might be found in the project vicinity, and take place on the construction site immediately prior to the start of construction. Documentation of the training (i.e., a sign-in sheet) shall be retained at the site and shall be submitted with applicable reports to the Placer County Community Development Resource Agency.*

8-2(b) *If cultural resources are discovered during construction, then all work must halt within a 100-foot radius of the discovery. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologists, as well as a tribal representative from the United Auburn Indian Community will be called to evaluate the significance of the find. Work cannot continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the National Register of Historic Places/State Register and the tribal representative and County staff have coordinated regarding the find. If a potentially-eligible resource is encountered, then the archaeologist, Placer County, and the United Auburn Indian Community (UAIC) will arrange for either 1) total avoidance of the resource, if possible; 2) test excavations or total data recovery; or 3) other alternative forms of mitigation. The determination shall be formally documented in writing and submitted to the Placer County as verification that the provisions in CEQA for managing unanticipated discoveries have been met.*

8-3 Disturb any human remains, including those interred outside of dedicated cemeteries. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

While portions of the project site have been previously disturbed as part of installation of the Antelope Canal, grading of associated access roads, underground utilities, previous vegetation removal, and pastoral activities, the proposed project would include ground-disturbing activities such as excavation associated with construction of the octagon building and wine cave, as well as new building foundations and trenching for new utility lines. As previously discussed, the project site is located in an area sensitive for prehistoric archaeological resources, such as those associated with the

ancestral Nisenan culture, whose territory encompassed the project site. Prehistoric sites often also contain human remains.

While field surveys conducted as part of the Cultural Resources Study did not detect human remains, the potential for human remains to be discovered during construction cannot be eliminated given the known prehistoric occupation of the project vicinity by Native American tribes. In the event that project ground-disturbing activities encounter human remains, a significant impact could occur.

Based on the above, the proposed project could disturb human remains, including those interred outside of formal cemeteries, during project construction. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

8-3 *The following language shall be noted on the project improvement plans, subject to review and approval by the Placer County Community Development Resource Agency:*

If articulated or disarticulated human remains are encountered on the proposed project site during construction activities, all work within 100 feet of the find must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Placer County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC.

8-4 Have the potential to cause a physical change which would affect unique ethnic cultural values, or restrict existing religious or sacred uses within the potential impact area. Based on the analysis below and with the implementation of mitigation, the impact is *less than significant*.

As discussed under Impact 8-1, the project site contains two known historic resources (a segment of Antelope Canal and a segment of Callison Road) and a third historic resource is located adjacent to the site (the original Central Pacific Transcontinental Railroad). However, the foregoing resources do not provide unique ethnic cultural

values or allow for religious or sacred uses, as the resources are associated with the project vicinity's early mining and transportation history. Additionally, the aforementioned resources would not meet any of the criteria to be considered "unique" as listed in PRC Section 21083.2(g). Furthermore, as discussed under Impact 8-2, known archaeological resources have not been recorded within the project site.

Nonetheless, given the project site's location within an area sensitive for prehistoric archaeological resources, including resources associated with the ancestral Nisenan culture, unknown sites that provide significant cultural value to Native American tribes culturally affiliated with the project area could be located on-site beneath the ground surface. In the event that project ground-disturbing activities encounter such sites, a significant impact could occur. It should be noted that potential impacts to tribal cultural resources are evaluated in Chapter 17, Tribal Cultural Resources, of this EIR.

Based on the above, the proposed project could have the potential to cause a physical change which would affect unique ethnic cultural values, or restrict existing religious or sacred uses within the potential impact area, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

8-4 Implement Mitigation Measure 17-1.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Additional detail regarding the cumulative project setting can be found in Chapter 20, Statutorily Required Sections, of this EIR.

8-5 Cause a cumulative loss of cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

Generally, while some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site would not generally be made worse by impacts to a cultural resource at another site due to development of another project. Rather, the resources and the effects upon them are generally independent. A possible exception to the aforementioned general conditions would be where a cultural resource represents the last known example of its kind or is part of larger cultural resources such as a single building along an intact historic Main Street. For such a resource, cumulative impacts, and the contribution of a project to them, may be considered cumulatively significant.

As described throughout this chapter, the project site contains two known historic resources (a segment of Antelope Canal and a segment of Callison Road) and a third historic resource is located adjacent to the site (the original Central Pacific Transcontinental Railroad). However, the two on-site resources do not meet eligibility for listing in accordance with NRHP and CRHR criteria. With respect to the cultural resource adjacent to the project site, the Central Pacific Transcontinental Railroad, the proposed project's work within the railroad ROW would be limited to improvements to Callison Road. As such, the proposed project would not cause a substantial adverse change in the significance of the railroad.

Similar to the proposed project, future development projects within Placer County would be required to implement project-specific mitigation to ensure any potential impacts to identified cultural resources are reduced to a less-than-significant level, where possible. Therefore, given that cultural resource impacts are generally site-specific and each future project within the County would be required to mitigate such impacts, any potential impacts associated with cumulative buildout of the County would not combine to result in a significant cumulative impact.

Based on the above, the proposed project would not contribute to a cumulative loss of cultural resources within the County. Therefore, the cumulative impact would be ***less than significant***.

Mitigation Measure(s)

None required.

9. ENERGY

9. ENERGY

9.1 INTRODUCTION

The Energy chapter of the EIR describes the potential impacts of the proposed project related to energy. The chapter includes a discussion of the existing energy setting, impacts associated with energy use, and mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based primarily on the Placer County General Plan[1] and associated EIR,[2] the Horseshoe Bar/Penryn Community Plan (HBPCP),[3] and the Placer County Sustainability Plan (PCSP).[4]

9.2 EXISTING ENVIRONMENTAL SETTING

The following section provides background information regarding the evaluation of energy under CEQA, as well as an overview of the existing environmental setting in relation to energy consumption within the project area.

Overview of Energy Analyses Under CEQA

Energy use refers to the consumption of electricity, natural gas, propane, coal, or other fuel types in order to perform work. Appendix F, Energy Conservation, of the CEQA Guidelines specifies the following:

> The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> 1) decreasing overall per capita energy consumption,
> 2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and
> 3) increasing reliance on renewable energy sources.
>
> In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code Section 21100(b)(3)).

Accordingly, the use of energy resources would not necessarily result in a significant environmental impact but, rather, the inefficient, wasteful, or unnecessary consumption of non-renewable energy resources would result in a significant impact.

The generation of electricity through non-renewable sources and the direct combustion of fuel is known to result in the emission of greenhouse gases (GHGs). As a result, energy use is closely related to GHGs and to automobile use. Refer to Chapter 6, Air Quality and Greenhouse Gas

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 21, 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan.* August 16, 1994 (updated June 28, 2005).
4 Placer County Community Development and Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy*. January 28, 2020.

Emissions, and Chapter 16, Transportation, of this EIR for additional detail related to GHG emissions and vehicle trip generation. This chapter specifically focuses on the use of energy during construction (i.e., the use of diesel-fueled off-road equipment, emergency generators, heavy truck use for hauling materials, worker commutes, etc.) and operation of the proposed project (i.e., the combustion of propane for cooking appliances, heating mechanisms, electricity use within the on-site buildings, and energy use associated with patron and employee vehicle trips). Propane use is typically considered in units of kilo-British thermal units (kBTU), and electricity use is typically referred to in units of kilowatt-hours (KWh).

Energy Use in California

California is one of the highest energy demanding states within the nation. In the year 2020, the entire State consumed approximately 279,510.01 gigawatt-hours (GWh) of electricity. Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and other facets of daily life consume a variety of energy sources. However, despite California's high rate of energy use, the State has one of the lowest per capita energy consumption levels in the U.S.

Energy within the State is provided primarily to consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. California is the nation's top producer of electricity from solar, geothermal, and biomass energy. In 2019, the State was also the nation's second-largest producer of electricity from conventional hydroelectric power and the fifth largest from wind energy. Renewable resources, including hydropower and small-scale (less than 1-megawatt), customer-sited solar photovoltaic (PV) systems, supplied more than half of California's in-state electricity generation, and natural gas-fired power plants provided two-fifths.

Figure 9-1 presents the sources that are used to produce energy in the State. As presented therein, energy is mostly generated from natural gas combustion, followed by non-hydroelectric renewables (such as wind and solar) and hydroelectric. Figure 9-2 presents energy consumption within California for the most recent year for which data is available (2019). As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. The second largest consumer is the industrial sector.

Energy Use in Placer County

In the year 2020, Placer County consumed approximately 2,996.21 GWh, which constitutes approximately 1.07 percent of the total energy consumed within the State that year.[5]

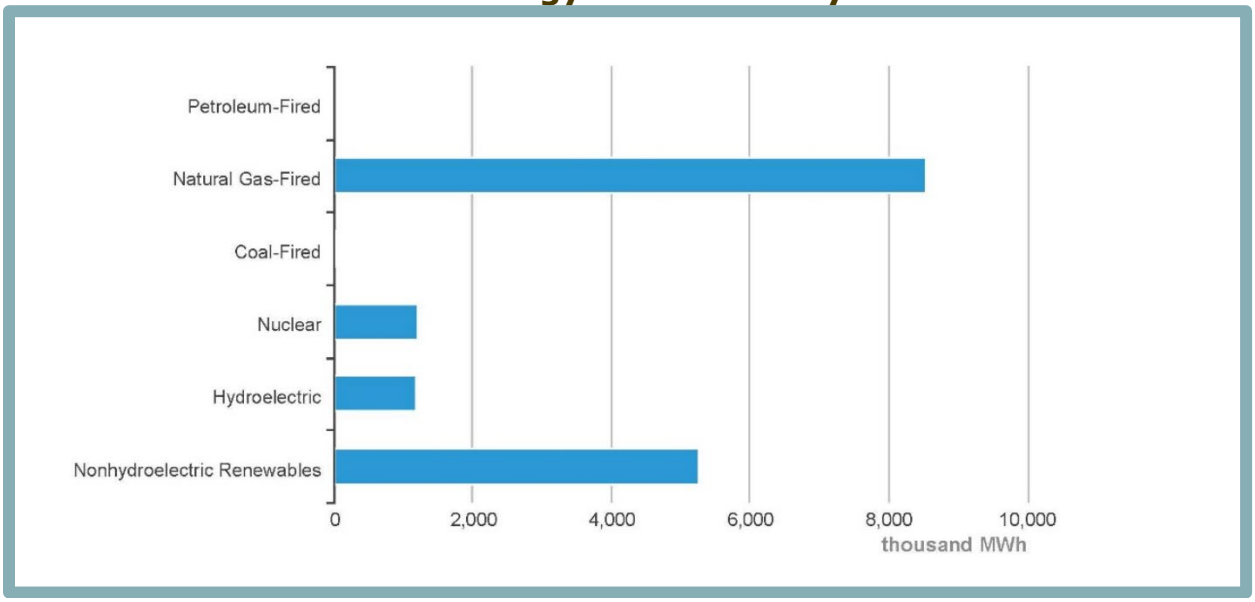
In 2020, the Placer County Board of Supervisors adopted the PCSP, which establishes goals and policies for energy efficiency.[6] As a result, the PCSP is considered the local plan for renewable energy and efficiency. However, the County first began programs to improve municipal building energy efficiency and resource conservation in 2005. For example, the Placer County Government Center Master Plan represents an effort to update the County's Dewitt Center. The Master Plan includes strategies for significant reductions in energy and water use, and efforts to reduce GHG emissions associated with commuting. The Master Plan also calls for on-site housing

[5] California Energy Commission. *Electricity Consumption by County*. Available at: http://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed March 2022.

[6] Placer County Community Development Resource Agency. *Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy.* January 28, 2020.

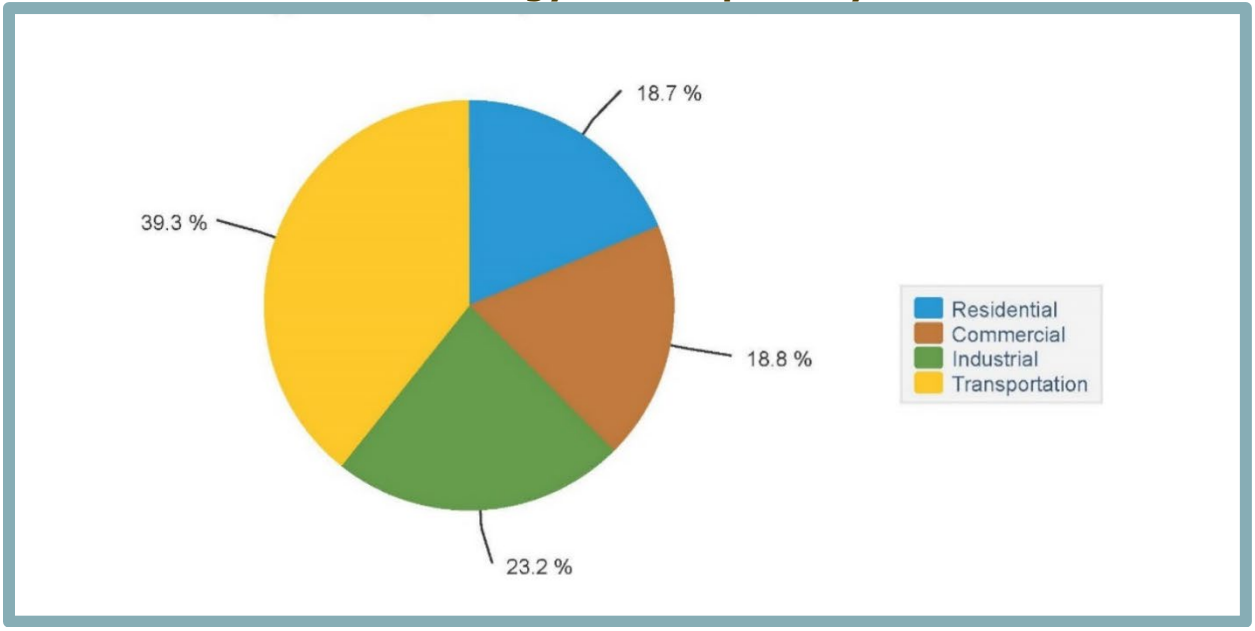
and commercial uses, in addition to water efficiency improvements and efforts to reduce employee commute trips and support alternative fuel vehicles.

Figure 9-1
California Energy Generation by Source



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed March 2022.

Figure 9-2
California Energy Consumption by Sector



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed March 2022.

The County has also encouraged increases in electric vehicle (EV) infrastructure at four County buildings, supported greater use of battery electric and plug-in hybrid vehicles in the County fleet, and installed solar panels on County buildings in Auburn and Roseville. Placer County is also involved in the Middle Fork Project hydroelectric generations, and the Pioneer Community Energy project, both of which are discussed in further detail below.

Middle Fork Project

The Middle Fork Project is a multi-purpose water supply and hydro-generation project designed to conserve and control waters of the Middle Fork American River, the Rubicon River, and several associated tributary streams. The Middle Fork Project stores water from rain and snow during the fall and winter months and releases water all year to meet the water demands within western Placer County and to generate hydroelectric power for the California electrical grid.[7] The Placer County Water Agency (PCWA), with Placer County as a partner, has operated the Middle Fork Project for over 50 years. Hydroelectric power from the Middle Fork Project has a combined generating capacity of approximately 224 megawatts (MW), with an average of 1,030,000 MW-hours per year (MWh/yr).

Pioneer Community Energy

Placer County and the cities of Auburn, Colfax, Lincoln, Loomis, and Rocklin have established a joint powers authority called Pioneer Community Energy (Pioneer). Currently, Pioneer provides a Community Choice Aggregation (CCA) program, which acts as an alternative electricity supplier to PG&E. The electric power is transmitted over PG&E transmission and delivery infrastructure. Pioneer's CCA program currently serves 90 percent of customers within its service area, which includes the project site.

Pioneer's CCA program provides local control over matters related to electric rate setting, electric energy procurement and incentives program development, as well as the opportunity to promote the use of locally-generated power to serve the needs of participating businesses and residents within its service territory, which includes both incorporated and unincorporated areas of Placer County. As a result, Pioneer provides the opportunity for business owners or individual residents, such as those proposed as part of the project, to opt into more locally- and renewably-sourced electricity as compared to the grid electricity provided by PG&E.

Public Safety Power Shutoffs

In an effort to prevent fires, PG&E initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the County. Based on the project site's location, the site is in an area that is more likely to be affected by a PSPS event.[8]

[7] Placer County. *Middle Fork Project Finance Authority*. Available at: https://www.placer.ca.gov/5413/Middle-Fork-Project-Finance-Authority. Accessed March 2022.

[8] Pacific Gas & Electric Co. *Interactive PSPS Planning Map.* Available at: https://vizmap.ss.pge.com/?_ga=2.94997403.624386528.1664230975-1068345172.1664230975. Accessed September 2022.

Energy Use at the Project Site

Currently, the project site consists primarily of undeveloped, oak woodland and grassland habitats. The Antelope Canal, owned by PCWA, traverses the entire property from east to west. Portions of the site have been graded and are used as dirt roadways, which provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. Therefore, under the current baseline condition, the project site results in virtually no energy demand.

9.3 REGULATORY CONTEXT

Energy consumption and generation is monitored and regulated through the efforts of various international, federal, State, and local government agencies. The agencies responsible for monitoring or reducing energy consumption are discussed below.

Federal Regulations

The following are the federal regulations relevant to energy.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards the U.S. Department of Transportation was tasked with establishing additional on-road vehicle standards and making revisions to standards as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and begun regulation of medium- and heavy-duty vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

State Regulations

The primary State regulatory agencies governing energy consumption are the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC).

The CEC, created by the Legislature in 1974, has seven major responsibilities: forecasting future energy needs; promoting energy efficiency and conservation by setting the State's appliance and building energy efficiency standards; supporting energy research that advances energy science and technology through research, development, and demonstration projects; developing renewable energy resources; advancing alternative and renewable transportation fuels and technologies; certifying thermal power plants 50 MW and larger; and planning for and directing State response to energy emergencies.[9]

[9] California Energy Commission. *About the California Energy Commission*. Available at: http://www.energy.ca.gov/about. Accessed December 2021.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that customers have safe, reliable utility service and infrastructure at reasonable rates, regulating utility services, stimulating innovation, and promoting competitive markets.[10]

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production. The following regulations are applicable to the proposed project.

Building Energy

The following regulations relate to energy efficiency and energy use reductions in the built environment.

Title 24, Part 6

Title 24 of the California Code of Regulations (CCR), which is known as the California Building Standards Code (CBSC), was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC (Public Resources Code [PRC] Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards reduced energy used and associated GHG emissions compared to the previous 2016 Title 24 standards. Non-residential buildings built to the 2019 standards use an estimated 30 percent less energy than those built to the 2016 standards.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2019 standards, which are the current standards, improved upon the 2016 CALGreen

[10] California Public Utilities Commission. *California Public Utilities Commission*. Available at: https://www.cpuc.ca.gov/about-cpuc. Accessed February 2022.

standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of EV charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs. Placer County does not require compliance with Tier 1 or Tier 2 CALGreen standards at this time.

Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

Senate Bill (SB) 1

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the State to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for PV systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the State to establish a self-sufficient solar industry. The goals included establishing

solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50 percent of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

Assembly Bill (AB) 1470

AB 1470 established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 required the CEC to evaluate the data available from a specified pilot program, and, if the CEC made a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the State by 2017.

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50 percent for indoor residential lighting and by 25 percent for indoor commercial lighting.

Climate Change Scoping Plan

In 2008, the California Air Resources Board (CARB) approved the first Scoping Plan related to the reduction of GHG emissions, which includes several measures related to energy efficiency. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan related to building energy include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions; and
4. Creating targeted fees, including a public goods charge on water use, fees on gases with a high global warming potential, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the State's GHG emission reduction priorities for the next five years. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. In December 2017, CARB adopted California's *2017 Climate Change Scoping Plan* (2017 Scoping Plan). The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update. Strategies within the 2017 Scoping Plan include implementing renewable energy and energy efficiency measures, increased stringency of the Low Carbon Fuel Standard (LCFS), measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-

Lived Climate Pollutant Plan, and increased stringency of SB 375 targets (discussed in further detail below).

Transportation/Fuel Energy

The following regulations relate to fuel efficiency and energy use reductions in the transportation and motorized vehicle sector.

AB 1493

In 2002 California adopted AB 1493, also known as the Pavley I standards, which required new passenger vehicles with model years 2009 to 2016 to meet more stringent fuel efficiency standards. Additional laws have extended these rules to cover vehicles from future model years.

Executive Order (EO) S-1-07

EO S-1-07, otherwise known as the LCFS, was adopted in 2009 and requires transportation fuels such as gasoline and diesel sold within the state to be less carbon intensive. These policies reduce emissions from on-road transportation and off-road equipment use in Placer County.

EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, CEC, CPUC, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

AB 1346

AB 1346 (October 2021) prohibits non-electric small off-road engines. Small off-road engines, which are used primarily in lawn and garden equipment, emit high levels of air pollutants and, in 2020, California daily criteria pollutant emissions from small off-road engines were higher than emissions from light-duty passenger cars. Thus, by January 1, 2024, regulations shall prohibit engine exhaust and evaporative emissions from new small off-road engines.

Climate Change Scoping Plan

The key elements of the Scoping Plan, as introduced above, related to transportation energy include the following:

1. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets; and
2. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS (17 CCR, Section 95480 et seq.).

Renewable Energy and Energy Procurement

The following regulation relates to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

Renewable Portfolio Standard (RPS), SB 350, and SB 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

Local Regulations

The most prominent local regulations related to energy are established by the Placer County General Plan and the Placer County Sustainability Plan, and are discussed in further detail below.

Placer County General Plan

The Placer County General Plan includes several goals that directly relate to energy efficiency. Some goals, however, have the indirect benefit of improving energy efficiency. For example, goals and policies related to the efficacy of the multi-modal transportation system would also affect fuel consumption and, thus, County-wide transportation energy resources. The following goals and policies from the Placer County General Plan related to energy, either directly or indirectly, are applicable to the proposed project.

Air Quality – General

Goal 6.F To protect and improve air quality in Placer County.

Policy 6.F.5 The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of Countywide indirect and areawide source programs and transportation control measures (TCM) programs. Project review shall also address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.

Air Quality – Transportation/Circulation

Goal 6.G To integrate air quality planning with the land use and transportation planning process.

Policy 6.G.3 The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Policy 6.G.5 The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.

Policy 6.G.6 The County shall require large new developments to dedicate land for and construct appropriate improvements for park-and-ride lots, if suitably located.

Transportation – Transportation Systems Management (TSM)

Goal 3.C To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

Policy 3.C.1. The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.

Policy 3.C.2. The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.

Policy 3.C.3. The County shall work with other responsible agencies to develop other measures to reduce vehicular travel demand and meet air quality goals.

Policy 3.C.4. During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.

Transportation – Non-Motorized Transportation

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.9 Consider Complete Streets infrastructure and design features in street design and construction to create safe and inviting environments for all users consistent with the land uses to be served.

Horseshoe Bar/Penryn Community Plan

The following goal related to energy from the Community Design Element of the HBPCP is applicable to the proposed project.

Goal 6 Take advantage of the best energy technology to maximize the energy efficiency of all buildings and structures.

Placer County Sustainability Plan

The PCSP is a planning document that outlines the programs and policies that are recommended for implementation by the community and the County to achieve the most significant GHG emission reductions in unincorporated County. Implementation of the PCSP is intended to help achieve multiple community-wide goals, such as lowering energy costs, reducing air and water pollution, supporting local economic development, and improving public health and quality of life within Placer County. Strategies from the PCSP related to energy use that would apply to the proposed project include the following:

Strategy E-1. Facilitate a transition to electricity as the primary energy source for residential, mixed-use, commercial, and office buildings.

Strategy E-4. Encourage new residential, office, and commercial development, as mitigation for discretionary projects exceeding applicable CEQA GHG thresholds, to implement CALGreen Tier 1 standards and accelerate Zero Net Energy (ZNE) in new construction.

Strategy E-15. Incentivize new homes to install renewable energy generation and energy storage systems that can fully supply the home's energy needs, in cases where the required size of the renewable energy system is insufficient to fully meet on-site demand.

Strategy E-18. Encourage electrical customers to participate in demand-reduction programs.

Strategy OR-1. Promote use of hybrid and alternative fuel construction equipment for new developments and significant retrofits.

Strategy OR-2. Encourage property owners and landscaping companies to adopt the use of hybrid and alternative-fuel landscaping equipment and promote the availability of incentive programs for new efficient landscaping equipment.

Strategy T-1. Facilitate the installation of public electric vehicle (EV) charging stations at existing and new residential and non-residential uses.

Strategy T-3. Encourage new development to provide a mix of land uses and to be located contiguous to existing developed areas and infrastructure to support connectivity and to reduce trip lengths.

Strategy T-10. Promote infill development that combines multiple land use types.

9.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to energy are described below. In addition, a

discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact related to energy is considered significant if the proposed project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Method of Analysis

Quantitative thresholds for the analysis of potential impacts related to energy consumption have not been adopted by any local, regional, or statewide entities. Consequently, potential impacts of the project related to energy is determined based on whether the project would result in wasteful, inefficient, or unnecessary use of energy. In addition, the potential for the project to conflict with or obstruct a State or local plan for renewable energy generation or energy efficiency, such as the PCSP, is considered. The analysis of energy consumption includes consideration of energy demand during project construction and operations.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

9-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction. Based on the analysis below, the impact is *less than significant*.

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met through a hookup to the existing electricity grid. As such, construction of the proposed project would result in a temporary increase in energy consumption in the area. As the site develops, operational electricity demand would become the dominant demand source. Operational electricity demand would be much greater than construction, and is discussed further under Impact 9-2, below.

One of the primary energy-consuming activities associated with construction of the proposed project would be the soil hauling associated with properly grading and leveling the project site. However, site grading and leveling are required components of safe building practices and, thus, the energy consumption associated with such would not be

considered wasteful or unnecessary. Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the 17.96-acre project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, the entire construction phase is anticipated to occur over approximately four years. As a result, the increased energy demand associated with construction would take place for a limited amount of time compared to the operational lifetime of the project. Additionally, construction equipment would be used intermittently over the duration of the construction period, and equipment use would be restricted to the allowable hours set forth in Placer County Code Section 9.36.030(A)(7).

Specific considerations related to electricity and oil demand during construction are discussed separately below.

Electricity Demand During Construction

Typically, at construction sites, electricity from the existing grid is used to power portable and temporary lights or office trailers. Because grid electricity would be used primarily for steady sources such as lighting, not sudden, intermittent sources such as welding or other hand-held tools, the increase in electricity usage at the site during construction would not be expected to cause any substantial peaks in demand. Construction of the proposed project, which would result in temporary increases in electricity demand, would not cause a permanent or substantial increase in demand that would exceed PG&E's demand projections or exceed the ability of PG&E's existing infrastructure to handle such an increase. Therefore, project construction would not result in any significant impacts on local or regional electricity supplies, the need for additional capacity, or on peak or base period electricity demands. In addition, standards or regulations specific to construction-related electricity usage do not currently exist.

Oil Demand During Construction

All construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing a five-minute limit on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. Engine tiers are used to describe the emissions intensity and efficiency of an engine. Construction equipment with Tier 0 or Tier 1 engines are the least efficient, and Tier 4 is the most efficient. In November 2021, the CARB began developing standards for Tier 5 engines. As of 2015, vehicles with Tier 0 and Tier 1 engines are prohibited from being added to equipment fleets. Fleets with a total horsepower over 2,501, excluding non-profit training centers, may not add any Tier 2 engines and, starting January 1, 2023, all engines must be Tier 3 or higher.[11] The In-Use Off-Road Diesel Vehicle Regulation would, therefore, help to improve fuel efficiency for equipment used in construction of the proposed project.

[11] California Air Resources Board. *In-Use Off Road Diesel-Fueled Fleets Regulation Overview*, *Revised October 2016*. 2016.

The CARB enforces off-road equipment regulations through their reporting system, Diesel Off-road Online Reporting System (DOORS). Each construction fleet is required to update their DOORS account within 30 days of buying or selling a vehicle, and DOORS automatically calculates the fleet average index for each fleet. The fleet average index is an indicator of a fleet's overall emission rate, and is based on each vehicle's engine horsepower and model year, and whether it is equipped with a Verified Diesel Emission Control Strategy (VDECS). If a fleet cannot, or does not want to, meet the fleet average target in a given year, the fleet may instead choose to comply with the Best Available Control Technology (BACT) requirements. A fleet may meet the BACT requirements each year by turning over or installing VDECS on a certain percentage of its total fleet horsepower. 'Turnover' means retiring a vehicle, designating a vehicle as permanent low-use (a vehicle used less than 200 hours per year), repowering a vehicle with a higher tier engine, or rebuilding the engine to a more stringent emission standard. By each compliance date (annually on January 1st), the fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the BACT requirements.[12] The project would be required to comply with such regulations, which would ensure that construction equipment meets all State efficiency requirements.

Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction. Over time, as technology progresses and more stringent emissions standards are put in place, construction equipment engines become increasingly efficient.

As noted previously, the CARB prepared the 2017 Scoping Plan, which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels.[13] Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The In-Use Off-Road Diesel Vehicle Regulation and idling restriction regulations described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan. Project construction would also be required to comply with all applicable Placer County Air Pollution Control District (PCAPCD) rules and regulations, which are indirectly related to energy efficiency, which would help to further reduce energy use associated with the proposed project. Refer to Chapter 6, Air Quality and Greenhouse Gas Emissions, for a complete list of the applicable PCAPCD rules and regulations.

Conclusion

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands

[12] California Air Resources Board. *Frequently Asked Questions, Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation)*. August 2014.

[13] California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, as discussed above, which would help to reduce the temporary increase in demand. Therefore, construction of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

9-2 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project operations. Based on the analysis below, the impact is *less than significant*.

Energy use associated with operation of the proposed project would be typical of winery production and restaurant uses, requiring electricity for interior and exterior building lighting; operation of stoves, kitchen, and cleaning appliances; heating, ventilation, and air conditioning (HVAC) systems; electronic equipment; machinery; security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employee commutes, patrons to the project site, and the movement of goods. Building energy use and transportation energy use are discussed separately below.

Building Energy Demand

The proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, including the CBSC and CARB standards, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as door and window interlocks, direct digital controls for HVAC systems, and high efficiency outdoor lighting. The CALGreen Code requires that new buildings use a combination of energy efficiency and distributed renewable energy generation to meet all annual energy needs. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, an on-site solar generation system would be developed as part of the proposed project. The size and design of the on-site solar generation system has yet to be determined; however, the system is proposed to be located at the upper parking lot, as well as on the roof of the processing/warehouse building. The implementation of on-site solar would help to further reduce the proposed project's consumption of energy.

State regulations promote the generation of renewable energy and encourage energy efficiency through requirements placed on utility providers and strict development standards. For instance, the RPS requires utilities, including PG&E and Pioneer, to

procure an increasing proportion of electricity from renewable sources. Ultimately the RPS requirements mandate that all electricity produced within the State be renewably sourced by the year 2045. Based on the air quality modeling prepared for the proposed project (refer to Chapter 6, Air Quality and Greenhouse Gas Emissions, of this EIR, for additional details), the proposed project is anticipated to result in increased electricity consumption of approximately 2.47 GWh annually during operations. It is noted that, compared to the electricity consumption for all of Placer County, the proposed project's contribution would represent a 0.08 percent increase in electricity demand. It should further be noted that a 0.08 percent increase in electricity demand is a conservative estimate, given that the increase does not account for the on-site solar generation system, which has not yet been designed. Although the project would increase electricity demand in the project area, the increased demand is not anticipated to conflict with PG&E's or Pioneer's ability to meet the RPS requirements. In fact, PG&E has previously exceeded the RPS requirements as recently as the year 2017; in 2017, PG&E exceeded the RPS requirements by four percent by providing 33 percent of all delivered electricity through renewable sources. PG&E plans to increase the proportion of RPS compliant renewable sources of electricity in line with state requirements in the future.[14]

The proposed project would include the use of three, 1,500-gallon propane tanks. Propane would primarily be used for space conditioning, hot water heating for wine processing, operating the necessary equipment in the commercial kitchen, and powering an on-site emergency backup generator. Based on the air quality modeling prepared for the proposed project, the proposed project is anticipated to result in an annual propane consumption of approximately 8.768 billion BTU. However, increased energy and propane demand does not necessarily mean that a project would have an impact related to energy resources. Based on Appendix F of the CEQA Guidelines, a proposed project would result in an impact related to energy resources if a project would result in the inefficient use or waste of energy. The use of propane on-site would be required to comply with all applicable federal, State, and local standards, and the provision of propane would not conflict or obstruct with any State or local plans related to renewable energy.

With regard to landscaping and maintenance equipment, AB 1346 would require that all small off-road engines are all-electric by the time that the proposed project is operational. Given that electricity from PG&E or Pioneer is partially generated from renewable sources, the use of electric maintenance equipment would be considered more energy efficient than diesel- or gas-powered maintenance equipment.

Transportation Energy Demand

The average fuel economy for the U.S. passenger vehicle fleet was 24.1 miles per gallon (mpg) in 2019, the most recent year such data is available.[15] An average of 24.1 mpg, and an annual vehicle miles traveled (VMT) of approximately 934,765[16] for the project would result in the consumption of 923.5 barrels of gasoline a year. California is estimated

[14] Pacific Gas & Electric Co. *Renewable Energy*. Available at: https://www.pgecorp.com/corp_responsibility/reports/2018/bu07_ renewable_energy.html. Accessed March 2022.

[15] U.S. Energy Information Administration. *Total Energy, Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy*. Accessible at: https://www.eia.gov/totalenergy/data/browser/?tbl=T01.08#/?f=A&start=200001. Accessed March 2022.

[16] KD Anderson & Associates, Inc. *Transportation Impact Analysis for Project 8 Winery, Placer County, California.* September 12, 2022.

to consume approximately 662 million barrels of petroleum per year.[17] Based on the annual consumption within the State, vehicle trips generated by the proposed project would result in a 0.0001 percent increase in the State's current consumption of gasoline.

The calculation above is likely an overestimate, as the estimate does not account for the increasing ownership of electric vehicles. California leads the nation in registered alternatively-fueled and hybrid vehicles. In fact, under SB 500, the State has required that, starting in the year 2030, all cars sold shall be zero-emission/electric vehicles. Electric car ownership is rapidly increasing in Placer County as well. For instance, 2,699 zero-emission vehicles were purchased in Placer County in 2021, which is a stark increase compared to the 1,465 zero-emission vehicles that were purchased in Placer County in 2020.[18] In addition, State-specific regulations encourage fuel efficiency and reduction of dependence on oil. Improvements in vehicle efficiency and fuel economy standards help to reduce consumption of gasoline and reduce the State's dependence on petroleum products. The 2019 CBSC also requires new developments to include the necessary electrical infrastructure for EV charging stations. For example, pursuant to the 2019 CALGreen Code, all new non-residential buildings with 101 to 150 parking spaces are required to install EV Capable infrastructure in seven on-site parking spaces, and are required to designate 11 spaces for clean air vehicles. The proposed project would include a total of 132 parking spaces on-site, and, thus, would be required to comply with the aforementioned requirements. Based on the above, the actual consumption of gasoline associated with the proposed project is anticipated to be even lower than the 0.0001 percent statewide contribution noted above. The proposed project would also be required to comply with all applicable regulations associated with vehicle efficiency and fuel economy.

Conclusion

Based on the above, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and impacts related to operational energy would be considered ***less than significant***.

Mitigation Measure(s)

None required.

9-3 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

As stated previously, the proposed project would be required to comply with all applicable State regulations related to renewable energy and energy efficiency, including, but not limited to, Title 24 and Title 20 of the CBSC, SB 1 related to solar energy systems, AB 1470 related to solar water heating, and AB 1109 related to lighting efficiency.

[17] U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Accessible at: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA. Accessed March 2022.

[18] California Energy Commission. *New ZEV Sales in California*. Available at: https://www.energy.ca.gov/data-reports/energy-insights/zero-emission-vehicle-and-infrastructure-statistics/new-zev-sales. Accessed March 2022.

The PCSP is considered the local plan for renewable energy and efficiency. The PCSP contains community-wide and municipal energy efficiency and GHG mitigation strategies that can be applied to discretionary projects, as feasible. Energy reduction strategies, which are prefaced by an "E", cover the topics of energy efficiency, energy conservation, and renewable energy for both residential and nonresidential buildings. Most strategies focus on reducing electricity and natural gas use, but a few strategies reduce emissions from other fuel use. Table 9-1 evaluates the project's consistency with the strategies from the PCSP that are applicable to the proposed project.

Table 9-1
Project Consistency with the PCSP

Strategy	Consistency Discussion
Strategy E-1: Facilitate a transition to electricity as the primary energy source for residential, mixed-use, commercial, and office buildings.	Electricity is anticipated to be the primary source of energy for the proposed project. However, natural gas appliances (i.e., stovetops, water heaters, etc.) are also allowed in Placer County. As discussed above, the proposed project would include the use of three, 1,500-gallon propane tanks. Propane would primarily be used for space conditioning, hot water heating for wine processing, operating the necessary equipment in the commercial kitchen, and powering an on-site emergency backup generator. Thus, the proposed project would consume both electricity and propane, and compliance with this strategy is uncertain at this time.
Strategy E-4: Encourage new residential, office, and commercial development, as mitigation for discretionary projects exceeding applicable CEQA GHG thresholds, to implement CALGreen Tier 1 standards and accelerate ZNE in new construction.	Placer County does not require CALGreen Tier 1 standards. New commercial structures that are constructed with all electric appliances are expected to achieve ZNE. However, the project is anticipated to include the use of propane. It is noted, however, that the proposed project would not exceed applicable CEQA GHG thresholds and, thus, this strategy is not directly applicable to the project.
Strategy E-17: Promote onsite renewable energy generation and energy storage for new small- and medium-sized non-residential structures.	An on-site solar generation system, to be located at the upper parking lot, as well as on the roof of the processing/warehouse building, would be developed as part of the proposed project. Therefore, a portion of the energy consumed by the proposed project would be produced by an on-site renewable energy generation system.
Strategy OR-1: Promote use of hybrid and alternative fuel construction equipment for new developments and significant retrofits.	The applicant has not committed to the use of hybrid or alternative construction equipment. However, as noted in Chapter 6, Air Quality and Greenhouse Gas Emissions, the project's maximum construction-related emissions would be below the applicable PCAPCD thresholds. Nonetheless, compliance with this strategy is uncertain at this time.
Strategy OR-2: Encourage property owners and landscaping companies to adopt the use of hybrid and alternative-fuel	Consistent with AB 1346, landscaping equipment used by property owners and landscaping companies would be required to be electric by the

(Continues on next page)

Table 9-1
Project Consistency with the PCSP

Strategy	Consistency Discussion
landscaping equipment and promote the availability of incentive programs for new efficient landscaping equipment.	time the proposed project is operational. Thus, the project would comply with this strategy.
Strategy T-1: Facilitate the installation of public electric vehicle (EV) charging stations at existing and new residential and non-residential uses.	The CBSC requires that all new non-residential buildings with 10 or more parking spaces install EV Capable infrastructure in approximately six percent of parking spaces. Therefore, the proposed project would be required to provide public EV charging stations for a portion of the proposed on-site parking, and the proposed project would comply with the intent of this strategy.
Strategy T-3: Encourage new development to provide a mix of land uses and to be located contiguous to existing developed areas and infrastructure to support connectivity and to reduce trip lengths.	The proposed project would appropriately site a new commercial winery adjacent to recently planted vineyards on property under the same ownership as the proposed project site. In general, the proposed project is consistent with the existing land use designation and zoning of the project site. Given the nature of the proposed project, compliance with Strategy T-3 is largely inapplicable.
Strategy T-10: Promote infill development that combines multiple land use types.	The project site is not considered an infill location, and the site is generally adjacent to existing vineyards, undeveloped land, and rural residential uses. Additionally, as noted above, the proposed project would not include multiple land use types. Therefore, compliance with Strategy T-10 is inapplicable due to the nature of the proposed project and its location.
Source: Placer County Community Development and Resource Agency. Placer County Sustainability Plan: A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy. January 28, 2020.	

As shown in Table 9-1, the proposed project would comply with some of the suggested measures. For others, compliance is uncertain or inapplicable due to the nature of the proposed project and/or the project site location. Some strategies included in the PSCP, such as OR-2 and T-10, are considered supportive strategies to improve energy efficiency and reduce GHG emissions, and do not result in quantifiable reductions in GHG emissions or energy consumption. Additionally, the strategies set forth in the PCSP are not required to be implemented. In fact, the PCSP strategies are specifically recommended for discretionary projects when the applicable project-level GHG emission thresholds are exceeded. Under the PCSP, the County uses the PCAPCD's GHG thresholds to determine whether PCSP emission reduction measures are required. Because the proposed project's operational GHG emissions would be below the applicable GHG thresholds (refer to Chapter 6, Air Quality and GHG Emissions), implementation of the efficiency strategies included in the PCSP is not required. Most importantly, implementation of the proposed project would not interfere with the goals established in the PCSP nor preclude future projects from complying with the suggested strategies.

Based on the above, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and the impact would be ***less than significant***.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project's impacts related to energy use may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would generally include buildout of the HBPCP and the nearby Bickford Ranch Specific Plan (BRSP). Additional detail regarding the cumulative project setting can be found in Chapter 20, Statutorily Required Sections, of this EIR.

9-4 Result in cumulative energy impacts. Based on the analysis below, the impact is *less than significant*.

Impacts 9-1, 9-2, and 9-3 discuss the proposed project's consumption of energy on a project-level, within the context of existing State plans and regulations, as well as local plans. As discussed previously, the project would involve consumption of diesel, gasoline, propane, and electricity throughout construction and operations. However, all proposed structures would be built in compliance with existing statewide mandatory energy efficiency standards, such as those contained in the California Building Energy Efficiency Standards and the CALGreen Code. Compliance with the energy efficiency standards would reduce the amount of electricity consumed by the proposed development. State regulations would also help to reduce the amount of energy consumed by on-road vehicles over time. For instance, State and federal emissions standards and fuel economy standards result in increased fuel efficiency for on-road vehicles. In addition, although not required, the proposed project would generally comply with the efficiency strategies set forth in the PCSP. Overall, as concluded above, the proposed project would result in a less-than-significant impact related to the inefficient or wasteful use of energy or conflicting with a State or local plan for renewable energy or energy efficiency.

Similar to the proposed project, all future development within the HBPCP and BRSP would be required to comply with applicable State and local regulations related to energy efficiency. Increased efficiency would be ensured in the future as cumulative development occurs due to compliance with the State's robust energy efficiency requirements. For example, the 2019 CBSC has begun phasing in the provision of ZNE by requiring residential projects to meet 100 percent of their electricity needs through rooftop solar. Cumulative residential development would include rooftop solar to meet 100 percent of each project's electricity demand and, pursuant to 2019 CBSC, new non-residential

buildings associated with cumulative development would be required to be solar ready. Additionally, all future projects which exceed the PCAPCD's GHG thresholds of significance would be required to comply with the efficiency strategies included in the PCSP. Furthermore, energy efficiency regulations have been getting progressively more stringent over time. Thus, as cumulative development occurs under the increasingly stringent regulations, the energy use associated with such cumulative development is anticipated to be increasingly energy efficient over time as well.

Based on the above, implementation of the project in combination with other cumulative development would not result in the wasteful or inefficient use of energy; thus, a ***less-than-significant*** cumulative impact would occur.

Mitigation Measure(s)

None required.

10. Geology and Soils

10. GEOLOGY AND SOILS

10.1 INTRODUCTION

The Geology and Soils chapter of the EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by unstable earth conditions and various geologic and geomorphic hazards. In addition, the chapter evaluates any adverse impacts on paleontological resources.

Information from this chapter is primarily drawn from the Geotechnical Engineering Study prepared by Youngdahl Consulting Group (Appendix H),[1] a Geostructural Investigation prepared by Provost & Pritchard Consulting Group (Appendix I),[2] a Slope Stability Study for Septic Leach Field prepared by Youngdahl Consulting Group (Appendix J),[3] and a Paleontological Resources Assessment prepared by LSA Associates, Inc. (LSA) (Appendix K).[4] In addition, information was sourced from the Placer County General Plan,[5] the Placer County General Plan EIR,[6] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[7]

10.2 EXISTING ENVIRONMENTAL SETTING

Background setting information regarding the geology, soils, seismicity, and paleontological resources associated with the project site and the surrounding region is provided below.

Regional Setting

The project site is located within Placer County, California, in the eastern portion of the Sacramento Valley, which extends from Redding in the north to the Sacramento-San Joaquin Delta region in the south. The Sacramento Valley is bordered by the Coast Ranges to the west and the Sierra Nevada foothills to the east. The following section describes the geology and seismicity of the project region.

Regional Geology

The project region is located at the western margin of the Sierra Nevada Geomorphic Province, which is an approximately 400-mile-long province characterized by highly deformed north-south trending complex of metasedimentary rock and batholithic units. The Sierra Nevada batholith consists of many separate geologic bodies with ages ranging from 90 to 150 million years ago. The bedrock also includes Paleozoic to Mesozoic metamorphic rocks and Cenozoic volcanic

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1 Youngdahl Consulting Group. *Geotechnical Engineering Study for Project 8, 7615 Callison Road, Penryn, Placer County, California.* May 2022.
2 Provost & Pritchard Consulting Group. *Project 8 Geostructural Investigation – Preliminary Data Report – Wine Cave*. March 22, 2022.
3 Youngdahl Consulting Group, Inc. *7615 Callison Road, Penryn, California Slope Stability Study for Septic Leach Field.* March 29, 2022.
4 LSA Associates, Inc. *Paleontological Resources Assessment for the 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2101).* December 2, 2021.
5 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
6 Placer County. *Countywide General Plan EIR*. July 1994.
7 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

rocks.[8] The metasedimentary and crystalline basement rocks are highly fractured and faulted and are overlain by Quaternary sediment derived from surrounding hills. The subsurface soil types in the general area are characterized by unconsolidated Quaternary age sediments. These sediments consist of clayey to sandy silts ranging from depths of 5 to 10 feet below ground surface (bgs), overlying more competent fractured bedrock. The depth to bedrock is approximately 5 to 20 feet bgs.[9]

Regional Seismicity

A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults that is commonly braided and subparallel, but may be branching or divergent. Movement within a fault causes an earthquake. When movement occurs along a fault, the energy generated is released as waves that cause ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment the seismic waves move through.

The potential risk of fault rupture is based on the concept of recency and recurrence. The more recently a particular fault has ruptured, the more likely the fault would rupture again. The California Geological Survey defines an "active fault" as one that has had surface displacement within the past 11,000 years (Holocene). Potentially active faults are defined as those that have ruptured between 11,000 and 1.6 million years before the present (Quaternary). Faults are generally considered inactive if evidence of displacement is not present during the Quaternary. According to the California Department of Conservation, potentially active faults with Holocene-epoch surface displacement are not known to exist within the project region.

According to the Placer County General Plan, Placer County lies within a seismically active area of the western U.S., but beyond the influence of the highly active faults found along California's coast. The South Placer area is classified by the State Department of Conservation as a low-severity earthquake zone.[10] The western portion and central portions of the County are generally characterized by low seismicity, while the eastern area of the County, in the vicinity of Lake Tahoe, has relatively higher seismicity.[11] The areas of Placer County with the largest groundshaking risk are in the vicinity of Stampede Valley and Tahoe faults in the Truckee-Tahoe area.

Project Site Characteristics

The project site consists of approximately 17.96 acres of the 44.14-acre parcel area, which is generally bounded by rural land. The site terrain consists of rolling hills surrounding a knoll in the northeastern portion of the site. The geologic conditions on the project site are discussed below in further detail, including descriptions of existing site geology, soil conditions, seismicity and ground shaking, potential for earthquake-induced liquefaction, and expansive soils. In addition, the following section includes a description of known paleontological resources within the project area.

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8 LSA Associates, Inc. *Paleontological Resources Assessment for the 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2101).* December 2, 2021.

9 Partner Engineering and Science, Inc. *Phase I Environmental Site Assessment Report, Project 8, 7615 Callison Road, Penryn, California, 95663*. March 26, 2020.

10 California Department of Conservation. *Regulatory Maps and Reports (Alquist-Priolo and Seismic Hazard Zones).* Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed March 2022.

11 Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

Site Geology and Subsurface Soil Conditions

The geology of the project area is mapped to contain upper Jurassic Penryn Pluton, which consists of medium- to course-grained quartz diorite that formed as magma intruded the surrounding rock, cooled, and solidified below the surface.[12] The underlying rock at the project site is Mesozoic Granitic Rocks. Rocks in this formation are dominated by granite, quartz monzonite, granodiorite and quartz diorite.[13]

The soil types underlying the project site consist of the following: Andregg coarse sandy loam, 15 to 30 percent slopes; Andregg coarse sandy loam, 30 to 50 percent slopes; Caperton-Andregg coarse sandy loams, 2 to 15 percent slopes; and Caperton-Rock outcrop complex, 2 to 30 percent slopes (see Figure 10-1). The parent material consists of residuum weathered from granite, and the depth to a root restrictive layer (paralithic bedrock) is 18 to 33 inches. The natural drainage class is well drained, and water movement in the most restrictive layer is very low. The on-site soils are not flooded or ponded, and the shrink-swell potential is low. Water saturation zones do not occur within a depth of 72 inches. Organic matter content in the surface horizon is approximately one to two percent.[14]

Based on the subsurface exploration conducted on the project site by Youngdahl Consulting Group, the soils at the project site are typical for the general region and consist of a thin layer of soils overlying shallow granitic bedrock which has weathered to various degrees. The surface soils are generally composed of a blend of silts and sands in a medium stiff/dense condition. Non-engineering fill with a thickness of 4.5 feet was observed on-site, at the entrance to Callison Road.[15]

Seismicity and Ground Shaking

Fault rupture hazards are important near active faults and tend to reoccur along the surface traces of previous fault movements. Known faults do not extend across the project site, and the site is not located within an Alquist-Priolo Special Studies Zone. Thus, the potential for fault rupture, damage from fault displacement, or fault movement directly below the site is considered to be very low. However, the site is located within an area where shaking from earthquake-generated ground motion waves should be considered likely.

Liquefaction

Liquefaction occurs when saturated fine-grained sands and/or silts lose physical strength temporarily during earthquake induced shaking and behave as a liquid due to the loss of point-to-point grain contact and transfer of normal stress to the pore water. Liquefaction potential varies with water level, soil type, material gradation, relative density, and probable intensity and duration of ground shaking. Saturated and loose fine sands/silts were not encountered during site explorations.

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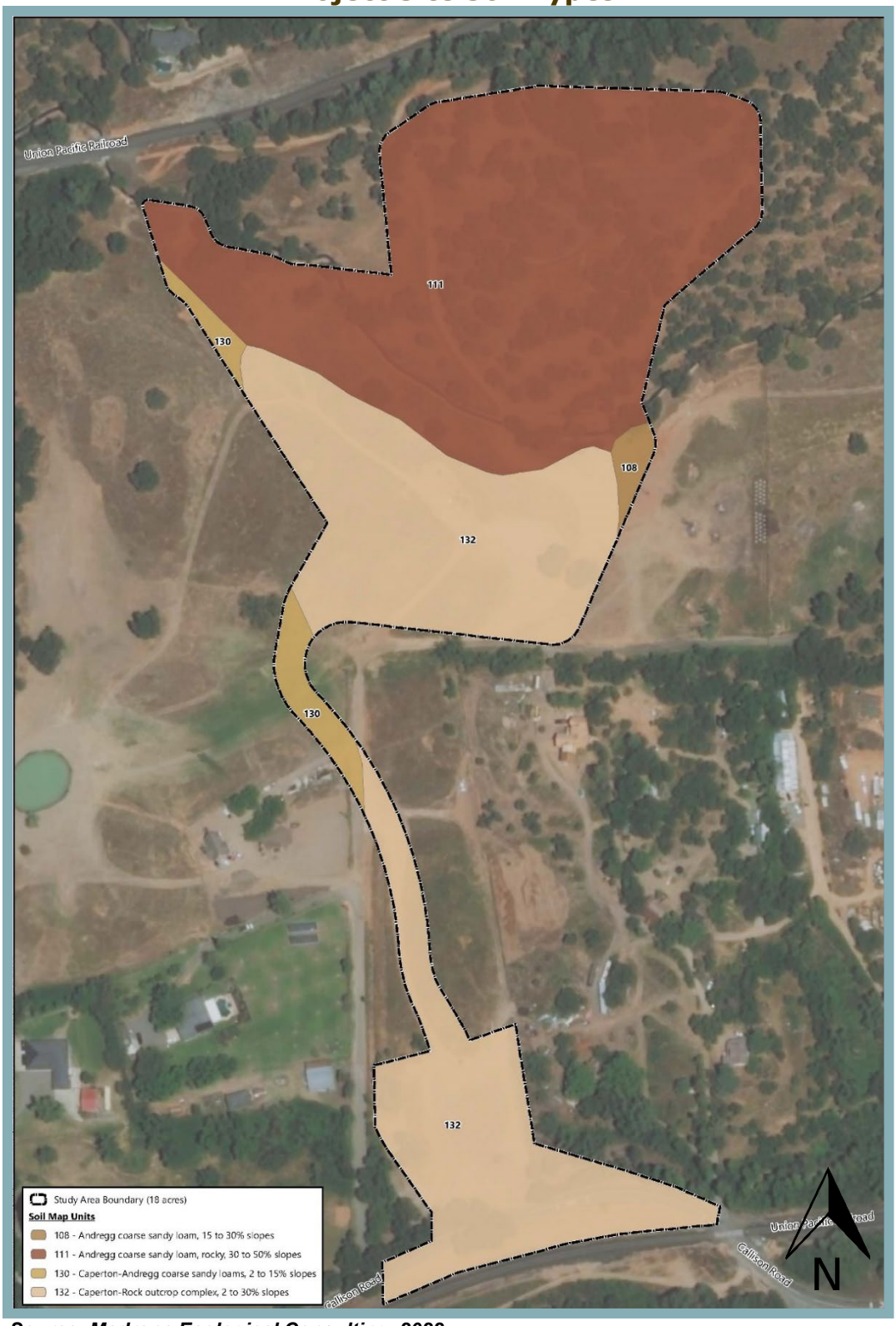
12 LSA Associates, Inc. *Paleontological Resources Assessment for the 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2101).* December 2, 2021.

13 Provost & Pritchard Consulting Group. *Project 8 Geostructural Investigation – Preliminary Data Report – Wine Cave*. March 22, 2022.

14 U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2022.

15 Youngdahl Consulting Group. *Geotechnical Engineering Study for Project 8, 7615 Callison Road, Penryn, Placer County, California.* May 2022.

Figure 10-1
Project Site Soil Types



Source: Madrone Ecological Consulting, 2022.

The California Geologic Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones, which are areas considered at risk of liquefaction-related ground failure during a seismic event based upon mapped surficial deposits and the depth to the areal groundwater table. The project site is not currently mapped for potential liquefaction hazard by the CGS.[16] The Geotechnical Engineering Report concluded that the overall potential for liquefaction within the project site is considered to be very low.

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change due to variation in moisture content. Compressible materials consisting of surficial organic material, loose soils, undocumented fills, debris, rubble, rubbish, etc., are considered unsuitable materials for support of proposed structures as such materials can differentially settle. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may cause unacceptable settlement of structures.

According to the Web Soil Survey, the on-site soils have a low shrink-swell potential[17] and, according to the Geotechnical Engineering Study performed for the proposed project, expansive soils were not encountered on the project site. However, intermittent or isolated pockets of expansive clay soils are known to occur in the region, and the potential for expansive soils to occur on the project site exists.[18]

Groundwater

Throughout the State, groundwater typically occurs in sedimentary deposits of sand and gravel that form groundwater aquifers. However, sedimentary deposits are not present at or near the project site. Rather, groundwater encountered within wells drilled in the project vicinity occurs within fractures in granitic bedrock. Within fractured bedrock, the groundwater surface generally mimics the topography, but with the depth to water being somewhat greater along ridges and near drainage divides and somewhat shallower at lower elevations and near drainages. The Department of Water Resources' Water Data Library provides groundwater level data for wells throughout the State, which can reveal trends related to groundwater levels along with short-term and long-term cycles. Based on a Public Well Impact Evaluation prepared for the proposed project, the average depth to groundwater in wells located near the project site was determined to be approximately 29 feet bgs.[19]

Groundwater was not encountered during the field explorations conducted as part of the Geotechnical Engineering Study.

Paleontological Resources

Paleontological resources are limited, non-renewable resources of scientific, cultural, and educational value that are explicitly afforded protection by CEQA.

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16 California Geologic Survey. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed July 22, 2022.

17 U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2022.

18 Youngdahl Consulting Group. *Geotechnical Engineering Study for Project 8, 7615 Callison Road, Penryn, Placer County, California* [pg. 3]. May 2022.

19 EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery*. June 25, 2022.



Several geologic units in Placer County are considered sensitive for paleontological resources, and fossils could be present.[20] As a result, a Paleontological Resources Assessment was prepared for the proposed project. The University of California Museum of Paleontology (UCMP) database indicates 64 fossil localities have been recorded within Placer County, three of which are localities that have produced vertebrate fossils. A locality near Rocklin yielded a Pleistocene-age mastodon from the Mehrten Formation, while a locality near Lincoln produced three Tertiary-age vertebrates, a bony fish, a mammal, and a reptile. A cartilaginous fish from the Cretaceous was recovered from the third locality in the Sierras. The remaining localities recorded in the UCMP database have produced plant and invertebrate specimens.[21] However, records of fossils or unique geologic features have not been recorded within the project area, and paleontological resources are not anticipated to occur on the project site due to the geologic unit (Jurassic Penryn Pluton) underlying the project site. Because the igneous rocks of the Jurassic Penryn Pluton formed from magma below the surface, such rock will not contain fossils.[22]

10.3 REGULATORY CONTEXT

The following section is a brief summary of the regulatory context under which soils, geology, seismic hazards, and paleontological resources are managed at the federal, State, and local levels.

Federal Regulations

The following are the federal environmental laws and policies relevant to soils, geology, seismic hazards, and paleontological resources.

Federal Earthquake Hazards Reduction Act

Passed by Congress in 1977, the Federal Earthquake Hazards Reduction Act is intended to reduce the risks to life and property from future earthquakes. The Act established the National Earthquake Hazards Reduction Program (NEHRP). The goals of NEHRP are to educate and improve the knowledge base for predicting seismic hazards, improve land use practices and building codes, and to reduce earthquake hazards through improved design and construction techniques.

International Building Code

The Uniform Building Code (UBC) was first published in 1927 by the International Council of Building Officials and is intended to promote public safety and provide standardized requirements for safe construction. The UBC was replaced in 2000 by the new International Building Code (IBC), published by the International Code Council (ICC), which is a merger of the International Council of Building Officials' UBC, Building Officials and Code Administrators International's National Building Code, and the Southern Building Code Congress International's Standard Building Code. The intention of the IBC is to provide more consistent standards for safe construction and eliminate any differences between the three preceding codes. All State building standard codes are based on the federal building codes.

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20 Placer County. *Placer County Conservation Program Final EIS/EIR*. May 2020.

21 Kenneth L. Finger. *Paleontological Records Search of the Whitehawk I and II Sites, Western Placer County*. July 26, 2016.

22 LSA Associates, Inc. *Paleontological Resources Assessment for the 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2101).* December 2, 2021.

State Regulations

The following are the State environmental laws and policies relevant to soils, geology, seismic hazards, and paleontological resources.

Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo Earthquake Fault Zone Act was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The Act is directed at the hazards of surface fault rupture and does not address other forms of earthquake hazards. The locations of active faults are established into fault zones by the Alquist-Priolo Zone Act. Local agencies regulate any new developments within the appropriate zones in their jurisdiction.

The Alquist-Priolo Zone Act regulates development near active faults so as to mitigate the hazard of surface fault rupture. The Alquist-Priolo Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineate "special study zones" along known active faults in California. Cities and counties affected by the special study zones must regulate certain development projects within the special study zones. The Alquist-Priolo Zone Act prohibits the development of structures for human occupancy across the traces of active faults. According to the AP Zone Act, active faults have experienced surface displacement during the last 11,000 years. Potentially active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity sometimes is difficult to obtain and may not exist.

Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code [PRC] Section 1690-2699.6) addresses non-surface rupture earthquake hazards, including liquefaction, induced landslides, and subsidence. A mapping program is also established by this Act, which identifies areas within California that have the potential to be affected by such non-surface rupture hazards. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

California Building Standards Code

The State of California regulates development within the State through a variety of tools that reduce or mitigate potential hazards from earthquakes or other geologic hazards. The 2019 California Building Standards Code (CBSC) (California Code of Regulations [CCR], Title 24) governs the design and construction of all building occupancies and associated facilities and equipment throughout California. In addition, the CBSC governs development in potentially seismically active areas and contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The California building standards include building standards in the national building code, building standards adapted from national codes to meet California conditions, and building standards adopted to address particular California concerns. The CBSC is updated on a triennial cycle. The latest update, the 2019 CBSC, became effective on January 1, 2020.

Public Resources Code Section 5097.5

Section 5097.5 of the PRC establishes protections for historic, prehistoric, archaeological, and paleontological features. In particular, Section 5097.5 prohibits the intentional excavation,

removal, destruction, injury, or defacement of historic or prehistoric ruins, burial grounds, and archaeological or vertebrate paleontological sites on public lands. Public lands are defined as those lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, public corporation, or any agency thereof.

Local Regulations

Relevant goals and policies from the Placer County General Plan and various other local guidelines and regulations related to soils, geology, seismic hazards, and paleontological resources are listed below.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to geology and soils are applicable to the proposed project.

Goal 5.D To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policy 5.D.2 The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

Policy 5.D.4 The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County's paleontological and archaeological resources.

Policy 5.D.6 The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a County-wide cultural resource data base, to be maintained by the Division of Museums.

Policy 5.D.7 The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Goal 1.K To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

Policy 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;
d. Replant graded areas to ensure establishment of plant cover before the next rainy season; and
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.

Goal 8.A To minimize the loss of life, injury, and property damage due to seismic and geological hazards.

Policy 8.A.2 The County shall require submission of a preliminary soils report, prepared by a California registered civil engineer and based upon adequate test borings, for every major subdivision and for each individual lot where critically expansive soils have been identified or are expected to exist.

Policy 8.A.3 The County shall prohibit the placement of habitable structures or individual sewage disposal systems on or in critically expansive soils unless suitable mitigation measures are incorporated to prevent the potential risks of these conditions.

Horseshoe Bar/Penryn Community Plan

The goals and policies related to geology and soils from the HBPCP applicable to the proposed project are presented below.

Natural Resources Element: Soils

Goal 1 Conservation of soils as a valuable natural resource.

Goal 2 Minimize soil loss due to accelerated erosion.

Policy 1 Utilize the existing inventory of important soil types to serve as a means of identifying unique and important resources prior to project development. In the absence of more detailed site specific studies, determination of soil suitability for particular land uses shall be

made according to the Soil Conservation Service's Soil Survey of Placer County.

Policy 2 Coordinate with local, state and federal agencies with a trustee responsibility for the management of natural resources when land development activities affect soil resource conservation and management efforts.

Policy 3 Require slope analysis maps during the environmental review process or at the first available opportunity of project review, as needed, to assess future grading activity, building location impacts, and road construction impacts.

Policy 4 Ensure implementation of the Placer County Grading Ordinance to protect against sedimentation and soil erosion. Minimize grading during the rainy season to reduce erosion and sedimentation potential to provide for slope stability.

Policy 5 Developers shall provide adequate drainage and erosion control during construction as described in the Placer County Land Development Manual.

Policy 6 Require graded slopes to conform to the natural topography to the greatest extent possible.

Natural Resources Element: Geology

Goal 1 Minimize loss of life, injury, damage to property, and impacts to human health resulting from geologic hazards.

Goal 2 Identify and protect important geologic and mineral resources in the plan area.

Policy 1 A detailed geological report shall be prepared during the environmental review process for public and private development projects proposed in high hazard areas. Recommendations of said report shall be incorporated as mitigation measures or conditions of project approvals, as appropriate. Such reports shall be completed by a registered geologist, or other qualified specialist, and shall conform to standards adopted by Placer County. A soils report shall be required for all building and grading permits located within areas of known slope instability or where significant potential hazards have been identified.

Policy 2 Require a soils report on all building permits and grading permits within areas of known slope instability or where a significant potential hazard has been identified.

Policy 3 Require septic leach fields and drainage plans during the environmental review process to direct runoff and drainage away from steep and/or unstable slopes.

Policy 4 During project review, consider the development limitations of geologic formations.

Placer County Code

Articles 15.04 and 15.48 of the Placer County Code are applicable to the proposed project and are summarized below.

Building and Construction Code

Article 15.04, Building and Construction Code, of the Placer County Code includes definitions, standards, and enforcement guidelines to ensure all new development comply with the latest version of the CBSC. Section 15.04.140 outlines the violations and penalties for any person who violates or fails to comply with any of the provisions in Article 15.04 of the Code.

Grading, Erosion and Sediment Control Ordinance

Article 15.48, Grading, Erosion and Sediment Control, of the Placer County Code, establishes regulations to limit the pollution of watercourses with hazardous materials, nutrients, sediments, and/or other earthen materials on or caused by surface runoff. Pursuant to Section 15.48.580, all drainage facilities must be designed and engineered consistent with the West Placer Storm Water Quality Design Manual. Section 15.48.630 establishes erosion and sediment controls for grading operations, including, but not limited to, use of stabilization methods to control erosion, preservation of natural features, limiting of runoff discharged from the site, and limiting the transport of dust off the project site or into any drainage course or body of water.

10.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to geology, soils, and paleontological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, a significant impact related to geology, soils, paleontological resources, or mineral resources would occur if the proposed project would result in any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - 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 based on other substantial evidence of a known fault;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- 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;
- Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;

- Have soils incapable of supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Result in significant disruptions, displacements, compaction or overcrowding of the soil;
- Result in substantial change in topography or ground surface relief features;
- Result in exposure of people or property to geologic and geomorphological (i.e., Avalanches) hazards, such as earthquakes, landslides, mudslides, seismic-related ground failure or similar hazards (see Chapter 19, Effects Not Found to be Significant);
- 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 (see Chapter 19, Effects Not Found to be Significant); and/or
- 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 (see Chapter 19, Effects Not Found to be Significant).

As noted above, issues related to whether the proposed project would result in the following are discussed in Chapter 19, Effects Not Found to be Significant, of this EIR:

- Result in exposure of people or property to geologic and geomorphological (i.e., Avalanches) hazards, such as earthquakes, landslides, mudslides, seismic-related ground failure or similar hazards;
- 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; and
- 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.

Method of Analysis

The analysis for the proposed project's geology and soils impacts is based primarily on the Geotechnical Engineering Study, the Geostructural Investigation, and the Slope Stability Study for Septic Leach Field prepared for the proposed project. The analysis for the proposed project's impact to paleontological resources is based primarily on the Paleontological Resources Assessment prepared for the proposed project. In addition, information from the California Department of Conservation, U.S. Department of Agriculture, the Placer County General Plan and associated EIR, and the HBPCP were used for analysis.

Geotechnical Engineering Study Analysis

The Geotechnical Engineering Study included a review of available geotechnical and geologic data for the project vicinity, a site reconnaissance and subsurface sampling, laboratory testing of representative subsurface samples, and a geophysics survey to characterize subsurface rippability and shear wave velocity.

The field survey was conducted on April 12, 2022 and included the excavation of eight test pits at the approximate locations shown in Figure 10-3 and Figure 10-4.

Gasch Geophysical Services, Inc. was retained to complete the geophysical survey, which included a refraction seismic investigation and a multichannel analysis of surface waves of the subsurface materials at the project site.

Figure 10-2
Geotechnical Engineering Study Analysis: Northern Test Pit Locations

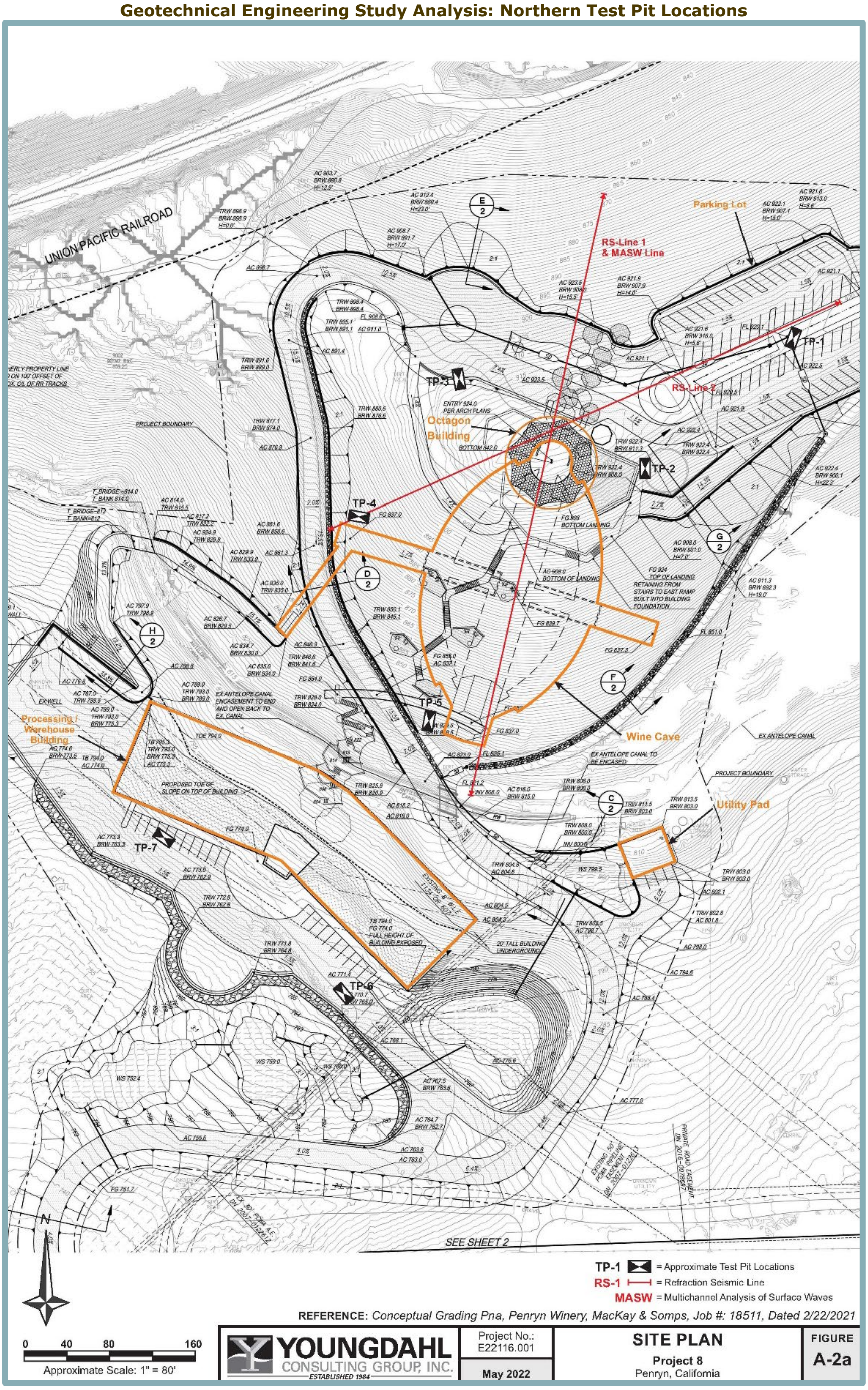
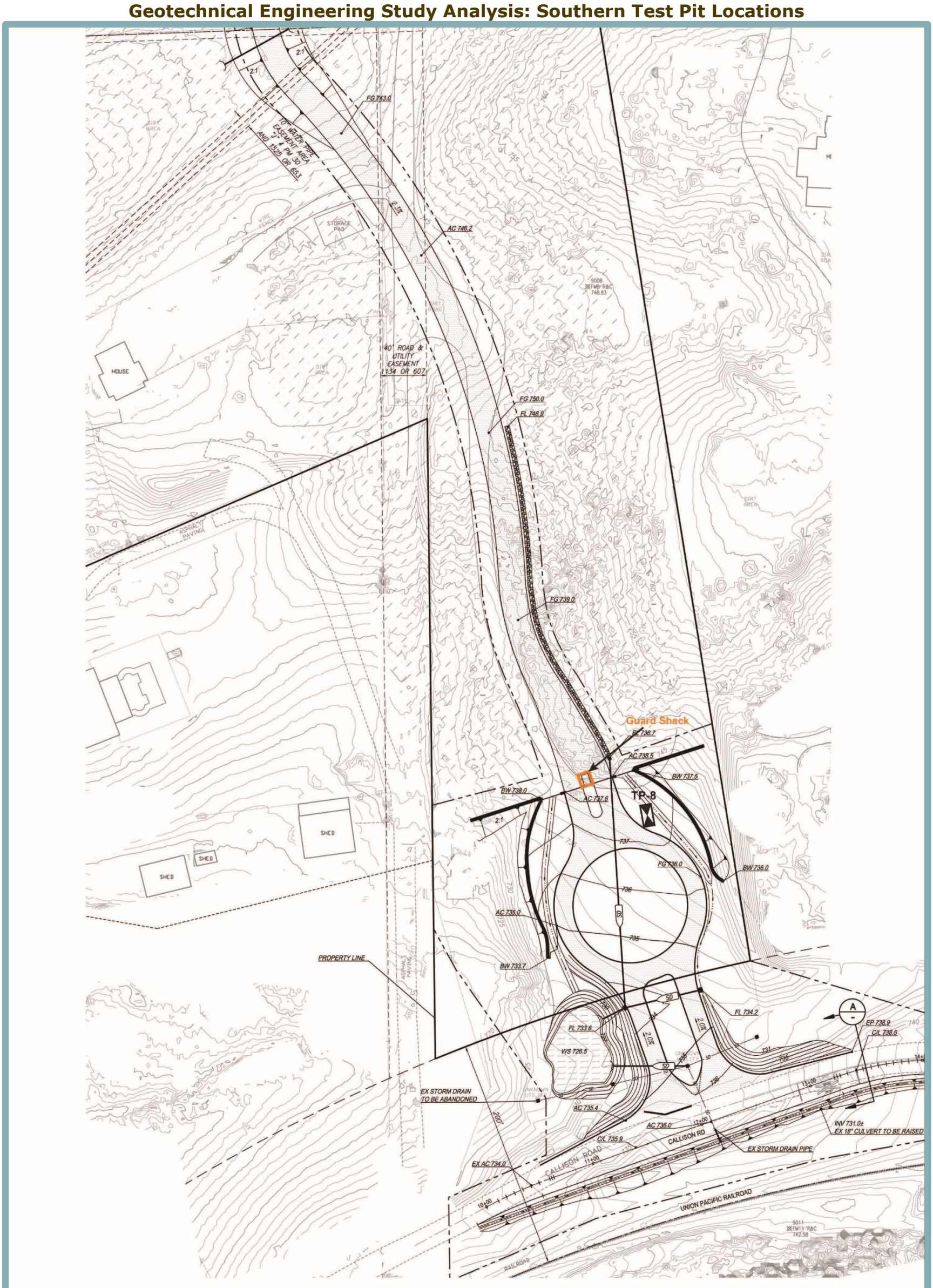


Figure 10-3
Geotechnical Engineering Study Analysis: Southern Test Pit Locations



Geostructural Investigation Analysis

The Geostructural Investigation Analysis was prepared to evaluate the feasibility of the proposed wine cave, retaining walls, and elevator shaft. The analysis included a review of site geology, site reconnaissance, geologic mapping, and an evaluation of subsurface conditions by drilling five vertical borings at the approximate locations shown in Figure 10-5. The soil was classified using the Unified Soil Classification System and the visual-manual procedure, and the engineering properties of the rock were characterized. The rock quality designation (RQD) of each core run was measured and logged.

The borings were drilled with a track-mounted CME-55 drill rig with auger and HQ-sized rock coring equipment. The core runs were approximately five feet long, and continuous rock cores were recovered from each hole and were visually classified and logged concurrently with drilling activities.

Slope Stability for Septic Leach Field

The proposed project would rely upon a septic system for the treatment of wastewater generated on-site. Septic systems generally consist of an underground septic tank and associated leach field. Two options are being considered for the septic system, both of which may include treatment in the East zone, which is located on a slope that exceeds 30 percent. As such, in compliance with Placer County Environmental Health Division requirements, a Slope Stability Study was prepared to evaluate if the installation of the on-site septic system with a leach field would adversely affect the slope stability.

The slope stability evaluation included a review of relevant geotechnical and geologic data, a field study consisting of a site reconnaissance and subsurface explorations, laboratory testing of field samples, and data evaluation/slope stability modeling. The field study was conducted on March 2, 2022, wherein three test pits were excavated to evaluate the near surface soil conditions and the depth to bedrock (see Figure 10-6). The slope stability was evaluated using the Spencer and Generalized Limit Equilibrium/Mortensen-Price (GLE) methods, as these computer-generated methods satisfy vertical force, horizontal force, and moments in the calculation process. Additionally, the slope condition was evaluated under both static and seismic loadings.

Paleontological Resources Assessment Analysis

The Paleontological Resources Assessment included examination of geologic maps of the project area, as well as geological and paleontological literature, to determine which geologic units are in the project area and whether fossils have been recovered in the project area or from those of similar geologic units elsewhere in the region. A fossil locality search through the UCMP and a field survey were determined to be unnecessary based on the results of the literature review and the identified geologic units in the project area.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

Figure 10-4
Geostructural Investigation Analysis: Soil Boring Locations

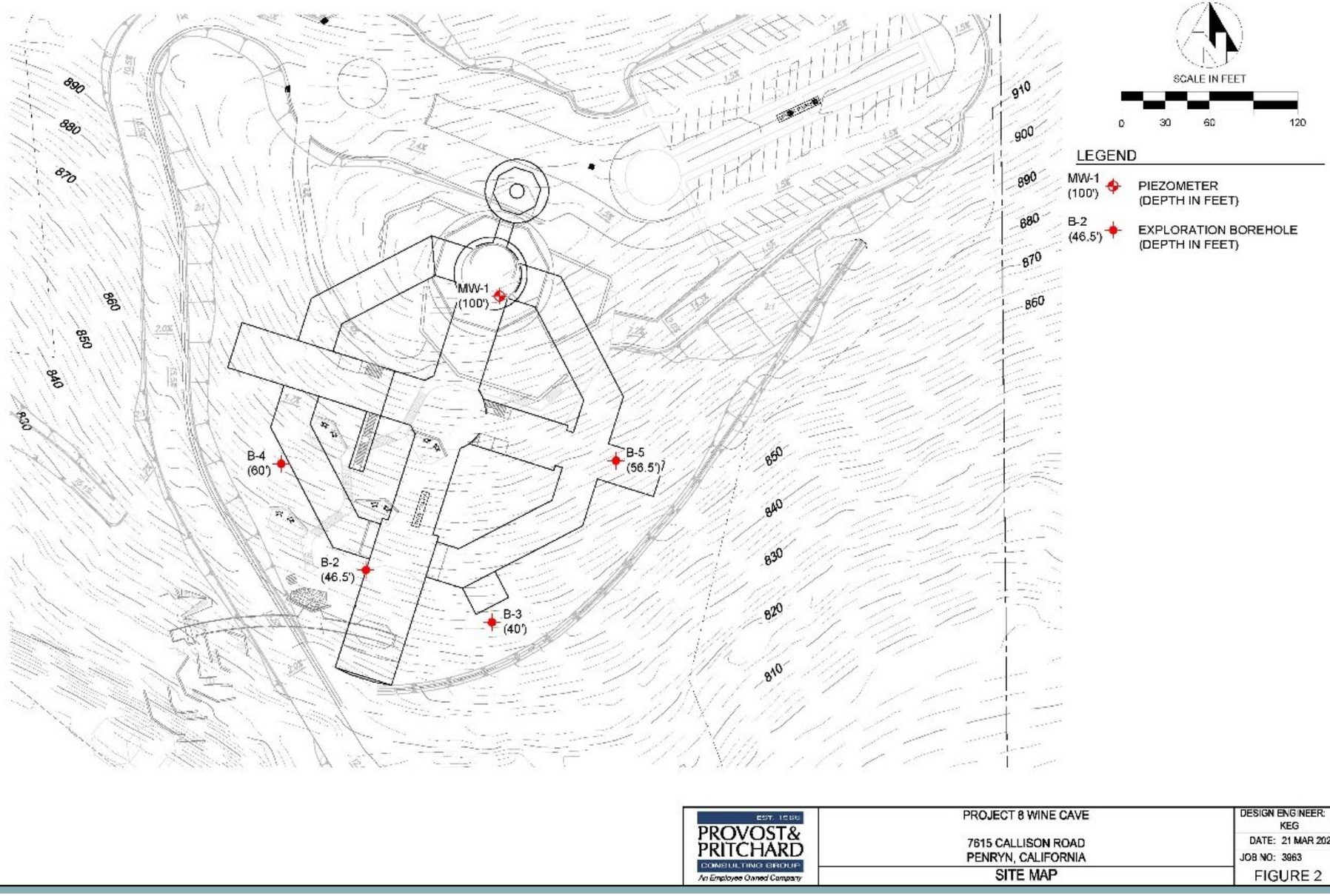
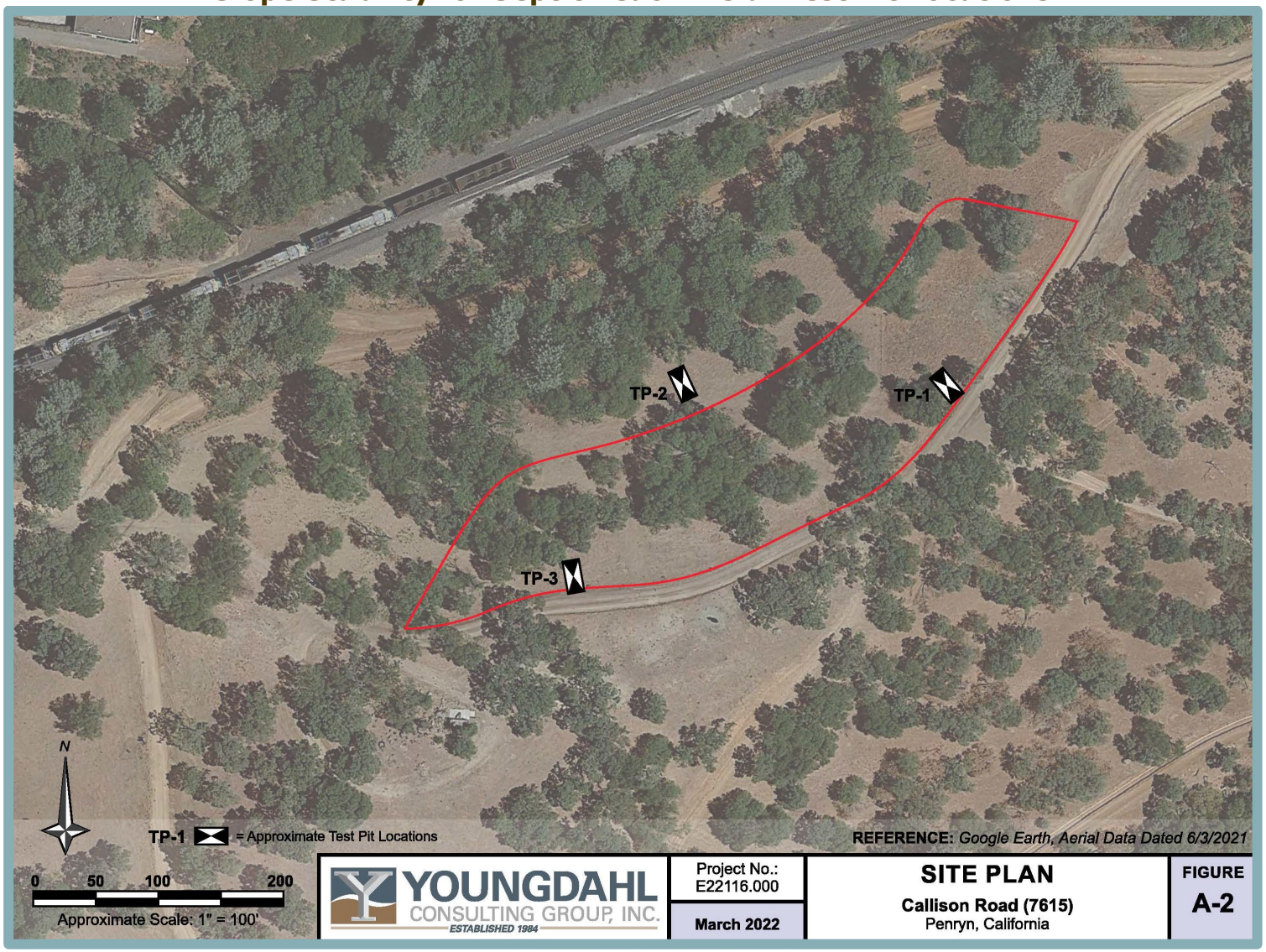


Figure 10-5
Slope Stability for Septic Leach Field: Test Pit Locations



10-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides. Based on the analysis below, the impact is *less than significant*.

According to the Placer County General Plan, Placer County lies within a seismically active area of the western U.S., but beyond the influence of the highly active faults found along California's coast. The western portion of the County, in which the proposed project is located, is generally characterized by low seismicity, and is not in an area at risk for severe ground shaking associated with earthquakes.[23] As discussed above, the project site is not underlain by any active faults, nor is the site located within an Alquist-Priolo Fault Study Zone. While lower-intensity earthquakes could potentially occur at the site, the design of project structures would be required to adhere to the provisions of the CBSC in effect at the time of issuance of building permits. The CBSC contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The Geotechnical Engineering Study concluded that due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to bedrock, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered nil. Furthermore, according to the Geostructural Investigation, indications of slope instabilities such as landslides, sloughing, tension cracks or hummocky terrain on the site's ground surface do not exist. Thus, because the project site does not contain any unstable slopes and is not located at or near any active or potentially active faults, the risk of landslide, liquefaction, and/or ground failure on the site would not be substantial.

Therefore, the proposed project would not expose people or structures to the risk of loss, injury, or death involving rupture of an earthquake fault, strong ground shaking, ground failure, liquefaction, or landslides, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

10-2 Result in substantial soil erosion or the loss of topsoil. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Erosion refers to the removal of soil from exposed bedrock surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation. Buildout of the proposed project would require grading, excavation, and other construction-related activities, which, during the early stages of construction, could cause topsoil to be exposed, potentially resulting in wind erosion or an accelerated rate of erosion during storm events. In addition, construction would involve cut and fill activities that would result in the stockpiling of soil, which would result in an increased risk of erosion. As noted previously, the proposed project would include a network of wine

[23] Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

caves that would be constructed at a maximum vertical depth of 90 feet below grade and would consist of a fermentation tank room, barrel aging rooms, collection room, two meeting rooms, and two restrooms. The wine caves would cover approximately 32,000 square feet (sf). The underground cut work required to excavate the proposed wine cave would be approximately 22,935 cubic yards (CY). However, considering the volume of fill that would be required on-site, the overall project would involve net cut of approximately 966 CY of material.

Following construction activities, the surface of the project site would be covered with either structures, pavement, or landscaping, and the potential for substantial soil erosion or the loss of topsoil to occur would be minimized.

Improvement Plans provided to the County prior to authorization of construction would conform to provisions of the County Grading Ordinance (Article 15.48 of the Placer County Code) and the Stormwater Quality Ordinance (Article 8.38 of the Placer County Code) that are in effect at the time of submittal. The preparation of and compliance with a stormwater pollution prevention plan (SWPPP) would be part of the project's National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit, issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). Before Improvement Plan approval, the Placer County Engineering and Surveying Division (ESD) would require evidence of the State-issued Waste Discharge Identification Number or filing of the Notice of Intent and fees. The SWPPP would include strategies to manage stormwater from the construction site and treat runoff before being discharged from the site. The site-specific SWPPP developed for the proposed project would have protocols to be followed and monitored during construction, including effective response actions if necessary. The SWPPP is considered a "living document" that could be modified as construction activities progress.

Although topsoil exposure would be temporary during early construction activities and would cease once development of buildings and structures occurs, after grading and leveling and prior to overlaying the ground surface with structures, pavement, or landscaping, the potential exists for erosion to occur. Therefore, short-term, construction related impacts associated with soil erosion and the loss of topsoil would be considered ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

10-2(a) *Prior to construction commencing, the applicant shall provide evidence to the ESD of a Waste Discharge Identification (WDID) number generated from the State Regional Water Quality Control Board's Stormwater Multiple Application & Reports Tracking System (SMARTS). This serves as the Regional Water Quality Control Board approval or permit under the National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit.*

10-2(b) *The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the requirements of Section II of the Land*

Development Manual (LDM) that are in effect at the time of submittal) to the Engineering and Surveying Division (ESD) for review and approval of each project phase. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and offsite. All existing and proposed utilities and easements, onsite and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and Placer County Fire Department improvement plan review and inspection fees with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans.

Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.

Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the Engineering and Surveying Division.

Prior to the County's final acceptance of the project's improvements, submit to the Engineering and Surveying Division one copy of the Record Drawings in digital format (on compact disc or other acceptable media) along with one blackline hardcopy (black print on bond paper) and one PDF copy. The digital format is to allow integration with Placer County's Geographic Information System (GIS). The final approved blackline hardcopy Record Drawings will be the official document of record.

10-2(c) *The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee. All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the ESD concurs with said recommendation.*

The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to



ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD.

The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded to the project applicant or authorized agent.

If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the Development Review Committee/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the Development Review Committee/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.

10-3 Be located on a geological 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, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Issues associated with unstable geologic units and/or soils, including landslide, lateral spreading, subsidence, liquefaction, and collapse are discussed below.

Expansive Soils

According to the Web Soil Survey, the on-site soils have a low shrink-swell potential[24] and, based on the sampling conducted as part of the Geotechnical Engineering Study performed for the proposed project, expansive soils were not encountered on the project

[24] U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey*. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2022.

site. However, intermittent or isolated pockets of expansive clay soils are known to occur in the region, and the potential for expansive soils to occur on the project site exists.[25]

Landslide

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Almost every landslide has multiple causes. Slope movement occurs when forces acting down-slope exceed the strength of the earth materials that compose the slope. Landslides in California occur mainly due to intense rainfall or earthquakes. Based on information available on the CGS website, the project site is not located within a State of California Seismic Hazard Zone for seismically-induced landsliding.[26] In addition, although moderate slopes exist across the project site, the Geostructural Investigation determined that indicators of slope instabilities, such as landslides, are not present on the site. Therefore, landslides are not expected to occur on-site, and impacts related to such would be less than significant.

Lateral Spreading

Lateral spreading is associated with terrain near free faces such as excavations, channels, or open bodies of water. The project site is not located near any such free faces. Additionally, the Geotechnical Engineering Study noted that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to lateral spreading. Given the absence of a permanently elevated groundwater table, relatively shallow depth to bedrock, and relatively low seismicity of the region, the Geotechnical Engineering Study concluded that lateral spreading would not occur on-site. Thus, impacts related to such would be less than significant.

Liquefaction

Liquefaction occurs when saturated fine-grained sand and/or silts lose their physical strength temporarily during earthquake induced shaking and behave as a liquid. The CGS has designated certain areas within California as potential liquefaction hazard zones. The areas considered at risk of liquefaction-related ground failure are based upon mapped surficial deposits and depth to the areal groundwater table. The project site is not currently mapped for potential liquefaction hazard by the CGS. Additionally, as discussed in further detail under Impact 10-1, the soil conditions at the project site, as determined as part of the Geotechnical Engineering Study, are not susceptible to liquefaction. Therefore, impacts related to such would be less than significant.

Collapse

As discussed above, the design of the project structures would be required to adhere to the provisions of the most recent version of the CBSC in effect at the time of building permit issuance. Additionally, the development of the project would be required to comply with the provisions established in Article 15.04 of the Placer County Code of Ordinances. Structures built according to the seismic design provisions of current building codes would

[25] Youngdahl Consulting Group. *Geotechnical Engineering Study for Project 8, 7615 Callison Road, Penryn, Placer County, California.* May 2022.

[26] California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/. Accessed July 2022.

be able to resist major earthquakes without collapse, but with some structural, as well as non-structural, damage.

In order to determine the competency of the bedrock underlying the project site, a Refraction Seismic and Multichannel Analysis of Surface Waves Investigation was prepared as a component of the Geotechnical Engineering Report prepared for the proposed project (see Appendix D of the Geotechnical Engineering Report, which is included as Appendix H to the EIR). The analysis measured the velocity at which a seismic wave travels through rock. The associated velocity indicates rock competency and rock strength. Very low seismic velocities usually indicate highly weathered or poorly compacted material, whereas high velocities indicate fresh, non-weathered rock. In addition, the Geostructural Investigation was conducted to determine the structural stability of the proposed wine cave network by conducting soil borings and evaluating the soil features using laboratory analysis. Both analyses determined that the top layer of soil was soft colluvium, which may include, but is not limited to, soft clayey sand, coarse grained sand, fill material, and highly weathered rock. However, at greater depths, the rock was determined to be slightly weathered material or fractured rock with few to no fractures, with competency/stiffness increasing with depth. Thus, below the first several feet of softer soils, the subsurface medium at the location of the proposed wine cave consists of hard and solid rock with few to no fractures, which would be considered structurally suitable for construction of an underground cave. Overall, the results of the analyses indicate that the on-site bedrock is appropriate for the intended use as a wine cave, and issues related to unstable soils, such as cave collapse, would not occur.

Given the project's adherence to the CBSC requirements and the competence of the rock underlying the project site, the proposed project would not be subject to substantial risks associated with building collapse.

Conclusion

From a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction. Based on the above, the proposed project would not likely be subject to issues associated with lateral spreading, subsidence, liquefaction, or collapse. However, the potential exists for expansive soils to present an adverse condition at the site. The Geotechnical Engineering Report includes recommendations to ensure adequate support of the proposed improvements. Such recommendations include, but are not limited to, compaction of engineered fills and provision of appropriate drainage at all slope faces. However, because a final geotechnical engineering report has not yet been prepared, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

10-3 *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval. The report shall address and make recommendations on the following:*

A. Road, pavement, and parking area design;
B. Structural foundations, including retaining wall design (if applicable);
C. Grading practices;
D. Erosion/winterization;
E. Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, potential for smectite clays etc.); and
F. Slope stability.

Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

If the geotechnical engineering report indicates the presence of critically expansive or other soil problems that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required prior to issuance of Building Permits. This requirement shall be so noted on the Improvement Plans.

10-4 Have soils incapable of supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. Based on the analysis below, the impact is *less than significant*.

Sanitary sewer service for the proposed project would be provided by an on-site septic system. Two design options are being considered for the septic system (refer to Figure 13-2 in Chapter 15, Public Services and Utilities, of this EIR). The first option includes a single primary leach field (West zone) with a dedicated repair area (East zone) should the primary system become compromised. The primary leach field would be located below Antelope Canal and at a lower elevation than that of the wine cave floor and the lower warehouse/processing building. The repair area would be located downslope of the top of the property, at an elevation beneath that of the tasting room building. The second option would consist of two smaller systems, each containing primary and leach areas in both the West and East zones. Each system would be designed to maximize effluent flow to the primary area while maintaining adequate area for repair and adequate separation between the primary and repair areas.

The East zone is located on a slope that exceeds 30 percent. Therefore, in compliance with Placer County Environmental Health Division requirements, a site-specific Slope Stability Study was prepared to evaluate if the future installation of the on-site septic system with a leach field on the East zone slope would adversely affect slope stability. As part of the Slope Stability Study, three test pits from the East zone were excavated to evaluate the soil conditions. Laboratory testing was conducted to determine the physical and engineering properties of the soils, and then slope stability modeling of such soils was conducted under both static and seismic conditions.

At the time of the field visit conducted by Youngdahl Consulting Group, surface-level indications of slope instability were not identified across the East zone leach field area. In addition, based on the modelled slope stability scenarios, the analysis revealed that the slope at the proposed leach field area in the East zone would remain stable under saturated conditions. As a result, the project site does not include soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

10-5 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Based on the analysis below, the impact is *less than significant*.

As part of the Paleontological Resources Assessment prepared for the proposed project, LSA examined geologic maps of the project area and reviewed relevant geological and paleontological literature to determine which geologic units are in the project area and whether fossils have been recovered in the project area or from those of similar geologic units elsewhere in the region. Based on the results of the literature review, a fossil locality search and/or field survey were determined not to be warranted.

As noted previously, the project site is located at the western margin of the Sierra Nevada Geomorphic Province, which is characterized by mountains that trend in a northwest-southeast direction forming the "backbone" of the State. Geologic mapping shows that the entire project area contains upper Jurassic Penryn Pluton. The upper Jurassic Penryn Pluton consists of medium- to course-grained quartz diorite that formed as magma intruded the surrounding rock, cooled, and solidified below the surface. Because the igneous rocks of the Penryn Pluton formed from magma below the surface, the rocks would not contain fossils and do not have paleontological sensitivity.

Because the entire project area contains upper Jurassic Penryn Pluton, which does not have the potential to produce scientifically sensitive paleontological resources and is not considered a unique geologic feature, development of the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

10-6 Result in significant disruptions, displacements, compaction or overcrowding of the soil, or substantial change in topography or ground surface relief features. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The topography of the site slopes at varying gradients with a maximum gradient of approximately 3:1 (refer to Figures 3-8 and 3-9 in the Project Description chapter of this

EIR). As a result, as part of the project, both standard and rockery retaining walls would be installed throughout the development area in order to stabilize on-site slopes. In addition, the proposed project would include site preparation, grading, paving, utility placement, and various other construction activities that would disrupt on-site soils. Furthermore, implementation of the proposed wine cave would involve considerable soil excavation. As such, soils on the project site would be reworked as necessary to support the development, potentially resulting in disruptions, displacements, compaction, or overcrowding of the soils. In addition, the proposed project would include modifications to the project site that would alter the existing topography and ground surface relief features. However, the Geotechnical Engineering Study includes several recommendations to alleviate the aforementioned issues. Nonetheless, the proposed project could result in significant disruptions, displacements, compaction or overcrowding of on-site soils, and/or substantial change in topography or ground surface relief features, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

10-6 Implement Mitigation Measures 10-2(b), 10-2(c), and 10-3.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Additional detail regarding the cumulative project setting can be found in Chapter 20, Statutorily Required Sections, of this EIR.

10-7 Cumulative increase in the potential for geological related impacts and hazards. Based on the analysis below, the cumulative impact is *less than significant*.

Impacts to geology, soils, seismicity, and paleontological resources related to implementation of the proposed project are analyzed throughout this chapter. As discussed above, existing geological and soil conditions on the site would be adequate to support development of the proposed project. In addition, Mitigation Measure 10-3, which requires the preparation of a final geotechnical engineering report, would ensure that the appropriate recommendations are incorporated into the project design to reduce any potential impacts related to geologic hazards.

While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for

each project, are independent. Additionally, any future project would be required to prepare a geotechnical report and incorporate appropriate recommendations into project design, similar to the proposed project.

As such, the potential for cumulative impacts related to geology, soils, seismicity and mineral resources, to which implementation of the proposed project might contribute, is ***less than significant***.

Mitigation Measure(s)

None required.

11. Hazards and Hazardous Materials

11. HAZARDS AND HAZARDOUS MATERIALS

11.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the proposed project area. The chapter includes a discussion of potential impacts posed by such hazards to the environment. Specifically, the chapter identifies whether the proposed project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

The Hazards and Hazardous Materials chapter is primarily based on information drawn from a Phase I Environmental Site Assessment[1] (ESA) and Shallow Soil Sampling Report[2] (see Appendix L) prepared for the project site by Partner Engineering and Science, Inc. (Partner), as well as the Placer County General Plan[3] and associated EIR,[4] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[5]

11.2 EXISTING ENVIRONMENTAL SETTING

The following section includes a definition of hazardous materials and descriptions of the existing conditions associated with the project site related to hazards and hazardous materials.

Hazardous Materials

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. The California Environmental Protection Agency (Cal-EPA), California Department of Toxic Substance Control (DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

The following discussion focuses on the potential Recognized Environmental Conditions (RECs) associated with the project site. A REC indicates the presence or likely presence of any hazardous substances in, on, or at a property due to any release into the environment, under conditions

1 Partner Engineering and Science, Inc. *Phase I Environmental Site Assessment Report.* March 26, 2020.
2 Partner Engineering and Science, Inc. *Shallow Soil Sampling Report.* July 25, 2022.
3 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
4 Placer County. *Countywide General Plan EIR*. July 1994.
5 Placer County. *Horseshoe Bar/Penryn Community Plan.* August 16, 1994 (updated June 28, 2005).

indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.[6]

Additionally, the following includes a discussion of historical RECs and controlled RECs associated with the project site. A historical REC indicates a past release of hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority. A historical REC does not have any property use restrictions, and, thus, does not have any use limitations with respect to future activities on the property. A controlled REC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Project Area Conditions

As discussed in Chapter 3, Project Description, of this EIR, the approximately 18-acre project site is located on portions of several parcels totaling 44.14 acres. The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. One residence, which includes a water well and settling pond, is located to the southwest of the 18-acre project site but within the 44.14-acre parcel area; thus, the residence is outside of the disturbance area of the proposed project. Records indicate that the residence was constructed in 1973. The project site is surrounded by oak woodlands and scattered rural residences, with Union Pacific Railroad (UPRR) tracks to the north and south.

Records dating back to as early as 1891 show the site as undeveloped land. Orchards appear throughout the central and southern portions of the property by 1938; however, between the early 1950s and mid-1960s, the orchards appeared to be diminishing. According to the Shallow Soil Sampling Report prepared for the proposed project, approximately 4.92 acres of orchard area were located on-site after 1950, a decrease as compared to the 9.41 acres that were present prior to 1950. By 1975, orchards were not present within the project site.

Potential On-Site Recognized Environmental Conditions

Based on the Phase I ESA prepared for the project site, Partner determined that the project site does not contain any readily discernable RECs, historic RECs, or controlled RECs such as aboveground storage tanks (ASTs), underground storage tanks (USTs), septic systems/cesspools, or polychlorinated biphenyl (PCB) containing equipment. However, the project site was historically used for agricultural purposes. Therefore, the potential exists that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored on-site. While not considered a REC, the presence of such chemicals at the site could be considered an environmental issue.

The former agricultural use of the project site appears to have been limited, with widespread operations occurring prior to the large-scale use of organochlorine pesticides. Additionally, the

[6] ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* 2013.

disturbance area associated with the project is not in an area that was historically used for agricultural purposes.

Nonetheless, a Shallow Soil Sampling Report was prepared to evaluate shallow soils in the former orchard areas on the project site for the presence of arsenic, lead, and organochlorine pesticides (OCPs), as a consequence of the former on-site orchard operations. For further detail regarding the method used to collect the on-site soil samples, see the Methods of Analysis section of this chapter. Based on the shallow soil samples collected on-site, concentrations of lead or OCPs above the applicable DTSC screening levels (SLs) were not detected within the project site soils. While arsenic was detected in one soil sample at a concentration above the DTSC Guidance background concentration of 12 milligrams per kilogram (mg/kg), the sample was located in a cut area where approximately 20 feet of soil had been removed from the grade of the former orchard. As such, Partner concluded that the detected concentration of arsenic in the sample is likely representative of naturally occurring arsenic concentrations present at deeper depths beneath the project site and not indicative of shallow soil impacts from former orchard operations. Furthermore, an additional soil sample was collected to the northeast of the cut area to obtain a representative sample of shallow soils present during the former orchard operations. The sample did not contain arsenic at a concentration above the laboratory reporting limit (RL). Therefore, the Shallow Soil Sampling Report concluded that significant arsenic concentrations from the former orchard operations are not present at the project site.

It should be noted that a Database Records Search was conducted by Environmental Data Resources, Inc. (EDR) as part of the Phase I ESA. However, the project site, as well as the adjacent properties surrounding the project site, are not identified on any local, State, or federally published lists of sites that have had releases of hazardous substances. Additionally, all sites of concern in the project vicinity have received regulatory closure, were determined to be of sufficient distance, and/or situated hydrologically cross- or down-gradient from the project site. Based on the findings of the Database Records Search, vapor migration is not expected to occur at the project site.

11.3 REGULATORY CONTEXT

The following discussion contains a summary of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the U.S. Environmental Protection Agency (USEPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California DTSC was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The following federal laws and related regulations govern hazardous materials.

Occupational Safety and Health Act

Congress passed the Occupational and Safety Health Act (29 U.S.C. Section 651 et seq. [1970]) to ensure worker and workplace safety. Their goal was to make sure employers provide their

workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. OSHA requires 40 hours of training for hazardous materials operators, as well as an annual eight-hour refresher course, which includes training regarding personal safety, hazardous materials storage and handling, and emergency response.

Comprehensive Environmental Response, Compensation, and Liability Act

The CERCLA (42 U.S.C. Section 9601 et seq. [1980]) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the CERCLA in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986, (Title III; Section 305(a)) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Resource Conservation and Recovery Act

The RCRA (42 U.S.C. Section 6901 et seq. [1976]) gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste management standards, and a comprehensive UST program. States have the authority to implement individual hazardous waste programs in lieu of the RCRA as long as the state program is as stringent as federal RCRA requirements and is approved by the USEPA.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. Section 2601 et seq. [1976]) provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint.

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State Regulations

Cal-EPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Regional Water Quality Control Board

The Cal-EPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within Cal-EPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

Department of Toxic Substances Control

The DTSC was established to protect California against threats to public health and degradation to the environment and to restore properties degraded by past environmental contamination. Through statutory mandates, DTSC cleans up existing contamination, regulates management of hazardous wastes, and prevents pollution by working with businesses to reduce hazardous waste and use of toxic materials in California. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. In addition, DTSC's Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund sites. State Superfund sites are additionally known as Annual Workplan sites, listed sites, or Cortese List sites. Superfund sites demonstrate evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC requires responsible parties to cleanup such sites. When responsible parties cannot be found or where they do not take proper and timely action, DTSC may use State funds to undertake the cleanup.

Cortese List

Pursuant to Government Code Section 65962.5(a), the DTSC shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the DTSC pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code.

California Code of Regulations

Hazardous waste is characterized and defined in CCR, Title 22, Sections 66261.20-24. Soils that meet the descriptions of the characteristics of hazardous waste defined in Sections 66261.20-24 and contain contaminants above regulatory screening levels are considered hazardous waste and must be handled and disposed of as such. The CCR includes the California Health and Safety Code.

California Health and Safety Code

The handling and storage of hazardous materials is regulated at the federal level by the USEPA under CERCLA, as amended by the SARA. Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California OES under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The CalARP and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning

quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by the Cal-EPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's OES, which coordinates the responses of other agencies, including Cal-EPA, CHP, California Department of Fish and Wildlife, Central Valley RWQCB, and the Placer County Fire Department.

Unified Hazardous Materials Management Regulatory Program

On January 1, 1996, Cal-EPA adopted implementing regulations and implemented a unified hazardous waste and hazardous materials management regulatory program (Unified Program), to consolidate the administration of specified statutory requirements for the regulation of hazardous wastes and materials. The Unified Program is implemented at the local level by government agencies certified by the Secretary of Cal-EPA. The Certified Unified Program Agency (CUPA) is responsible for implementation of the Unified Program. CUPA is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements.

Local Regulations

Relevant goals and policies from the Placer County General Plan and various other local guidelines and regulations related to hazards and hazardous materials are discussed below. The HBPCP does not contain specific goals or policies related to hazards and hazardous materials.

Placer County General Plan

The Placer County Board of Supervisors adopted the 2021 Health and Safety Element Update on November 16, 2021 through adoption of Resolution 2021-359. The update includes refinements to the goals, policies, and implementation programs that address potential and existing hazards

in the County. The following goals and policies from the 2021 Health and Safety Element Update, a component of the Placer County General Plan, are applicable to the proposed project.

Goal 8.E.1 To ensure the maintenance of an Emergency Management Program to effectively prepare for, respond to, recover from, and mitigate the effects of natural, human-made, or technological disasters.

Policy 8.E.1.1 The County shall continue to maintain, periodically update, and test the effectiveness of its Emergency Operations Plan.

Policy 8.E.1.2 The County shall continue to provide promotional programs that inform the general public of emergency preparedness and disaster response procedures.

Policy 8.E.1.3 The County shall maintain an emergency operations center to coordinate emergency response, management, disaster planning, and recovery activities.

Policy 8.E.1.4 The County shall provide alerts about potential, developing, and ongoing emergency situations through extensive alert and warning systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible. (PCSP, AH-1)

Policy 8.E.1.5 Encourage the creation of resiliency hubs in response to Public Safety Power Shutoff (PSPS) events that can serve as gathering places during emergencies and interruptions in services, and provide critical services such as access to water, electricity, and other needed services to those impacted by PSPS events. A resiliency hub should be powered by a microgrid or alternative sustainable form of energy.

Policy 8.E.1.6 The County shall continue to coordinate emergency preparedness, response, recovery, and mitigation activities with special districts, service agencies, voluntary organizations, cities within the County, surrounding cities and counties, and state and federal agencies.

Goal 8.E.3 To ensure that medical and public health systems proactively address human health hazards and inequities in the community.

Policy 8.E.3.1 The County shall establish an evacuation planning program to assist people to evacuate during hazardous events.

Policy 8.E.3.2 The County shall implement the adaptation strategies as contained in the Placer County Sustainability Plan necessary to ensure that medical and public health systems

proactively address human health hazards and inequities in the community.

Goal 8.F To minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous materials wastes.

Policy 8.F.1 The County shall review all proposed development projects that manufacture, use, or transport hazardous materials for compliance with the County's Hazardous Waste Management Plan (CHWMP). Such projects shall provide a buffer zone, to be determined by the County, between the installation and property boundaries sufficient to protect public safety.

Policy 8.F.3 The County shall require that applications for discretionary development projects that will generate hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage.

Policy 8.F.5 The County shall strictly regulate the storage of hazardous materials and wastes and shall require secondary containment and period examination for all such materials.

Policy 8.F.6 The County shall require that any business that handles a hazardous material prepare a plan for emergency response to a release or threatened release of a hazardous material.

Policy 8.F.7 The County shall identify sites that are inappropriate for hazardous material storage, maintenance, use, and disposal facilities due to potential impacts on adjacent land uses and the surrounding natural environment.

Policy 8.F.8 The County shall ensure that the use and disposal of hazardous materials in the County complies with local, state, and federal safety standards.

Policy 8.F.11 The County shall work with local fire protection and other agencies to ensure an adequate Countywide response capability to hazardous materials emergencies.

Placer County Environmental Health Division

The Placer County Environmental Health Division (PCEHD) is the CUPA for local implementation of the California Accidental Release Prevention Program and several other hazardous materials and hazardous waste programs. PCEHD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Placer County to prepare business emergency response plans if

hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of PCEHD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The PCEHD distributes the information in the hazardous materials business plans and business emergency response plans to emergency response agencies, such as fire departments and Hazardous Materials Response Teams. The PCEHD helps to facilitate the resources necessary for first responders to emergency incidents using emergency response plans and training responders for preparedness.

Placer County Local Hazard Mitigation Plan

The 2016 Local Hazard Mitigation Plan (LHMP) was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Placer County would be eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs, as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries. The purpose of the LHMP is to guide hazard mitigation planning and to better protect the people and property of the County from the effects of hazard events. The LHMP demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decisionmakers direct mitigation activities and resources.

A draft Placer County 2021 LHMP Update was submitted for review to both the California Governor's Office of Emergency Services (CalOES) and FEMA at the end of June 2021. On September 3, 2021, FEMA transmitted an Approval Pending Adoption letter which stipulated that the Placer County 2021 LHMP Update met all the regulatory requirements and was eligible for final adoption. The Placer County Board of Supervisors adopted the Placer County 2021 LHMP on November 16, 2021.[7] The goals of the 2021 LHMP are as follows:

- Goal 1: Minimize risk and vulnerability of Placer County to the impacts of natural hazards and protect lives and reduce damages and losses to property, economy, public health and safety, and the environment;
- Goal 2: Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts;
- Goal 3: Improve public awareness, education, communication, and preparedness for all hazards;
- Goal 4: Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event;
- Goal 5: Ensure a more resilient County that can adapt to the hazards created or exacerbated by Climate Change;
- Goal 6: Reduce fire severity and mitigate undesirable fire outcomes in Placer County; and
- Goal 7: Maintain FEMA Eligibility/Position the communities for grant funding.

Placer County and Placer Operational Area Emergency Operations Plan

The Placer County and Placer Operational Area Emergency Operations Plan (EOP) provides the guidelines needed for emergency response planning, preparation, training and execution

[7] Placer County. *Placer County 2021 Local Hazard Mitigation Plan Update.* June 2021.

throughout unincorporated Placer County.[8] The EOP is applicable to any natural disaster or manmade emergency occurring in or in the proximity of Placer County that affects, or may affect, the unincorporated area of the County (or the entire operational area, should response require coordination of the emergency response efforts of multiple agencies or jurisdictions). Emergency events range from minor oil spills, brush fires and minor flooding to severe winter storms, floods, wildland fires, earthquakes to countywide public health emergencies all of which have potentially catastrophic long-term public safety, economic, social and political implications.

11.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

In accordance with CEQA Guidelines Appendix G, and Placer County's Environmental Checklist, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (see Chapter 19, Effects Not Found to be Significant);
- 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 (see Chapter 19, Effects Not Found to be Significant);
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area (see Chapter 19, Effects Not Found to be Significant);
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (see Chapter 18, Wildfire); and/or
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires (see Chapter 18, Wildfire).

As noted above, issues related to whether the proposed project would result in the following are discussed in Chapter 19, Effects Not Found to be Significant, of this EIR:

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

[8] Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan.* Adopted December 14, 2010.

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

In addition, issues related to whether the proposed project would result in the following are discussed in Chapter 18, Wildfire, of this EIR:

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires.

Method of Analysis

The following sections describe the methods of analysis used to determine the presence of RECs for the Phase I ESA and Shallow Soil Sampling Report performed for the project site by Partner.

Phase I ESA

Site conditions and impacts for this chapter are based primarily on the Phase I ESA conducted for the proposed project. The purpose of the Phase I ESA was to identify existing or potential RECs (as defined by ASTM Standard E1527-13) affecting the project site that:

1. Constitute or result in a material violation or a potential material violation of any applicable environmental law;
2. Impose any material constraints on the operation of the project site or require a material change in the use thereof;
3. Require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the project site under any applicable environmental law;
4. May affect the value of the project site; and
5. May require specific actions to be performed with regard to such conditions and circumstances.

The analysis included within the Phase I ESA was conducted in accordance with the requirements of ASTM Standard E1527-13. In general, the Phase I ESA included:

1. A reconnaissance of the project site and adjacent sites;
2. Interviews with key personnel;
3. A review of historical sources;
4. A review of regulatory agency records; and
5. A review of a regulatory database report provided by a third-party vendor.

In addition, local agencies, such as environmental health departments, fire departments and building departments were contacted in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the project site, and the presence of any activity and use limitation (AULs).

Shallow Soil Sampling Report

On June 16, and July 6, 2022, a total of 21 shallow soil samples (including 16 site-specific samples, three background samples, and two duplicate samples) were collected from 19 sample locations throughout the former on-site orchard areas (see Figure 11-1). Sampling was performed in general accordance with the DTSC 2008 Interim Guidance for Sampling Agricultural Properties. Sampling equipment was pre-cleaned prior to arriving on-site and was decontaminated between each sample location with a three-stage decontamination procedure.

Prior to sampling, ground cover such as vegetation, roots, or other extraneous material was scraped away to expose the first encountered soil at each sample location. Shallow soil samples from each sample location were collected with a shovel at a depth of zero to six inches below ground surface (bgs) and were transferred into a laboratory-provided unpreserved glass jar.

The jars were filled with soil to capacity to minimize headspace, and were then labeled for identification and stored in an iced cooler. Following the collection of the soil samples, four representative samples were composited.

All discrete and composite samples were transported to SunStar Laboratories and analyzed for lead and arsenic using EPA Method 6010B, and OCPs using EPA Method 8081A. Concentrations of lead, arsenic, and OCPs found in the samples were then compared to the applicable DTSC SLs.

Project-Specific Impacts and Mitigation Measures

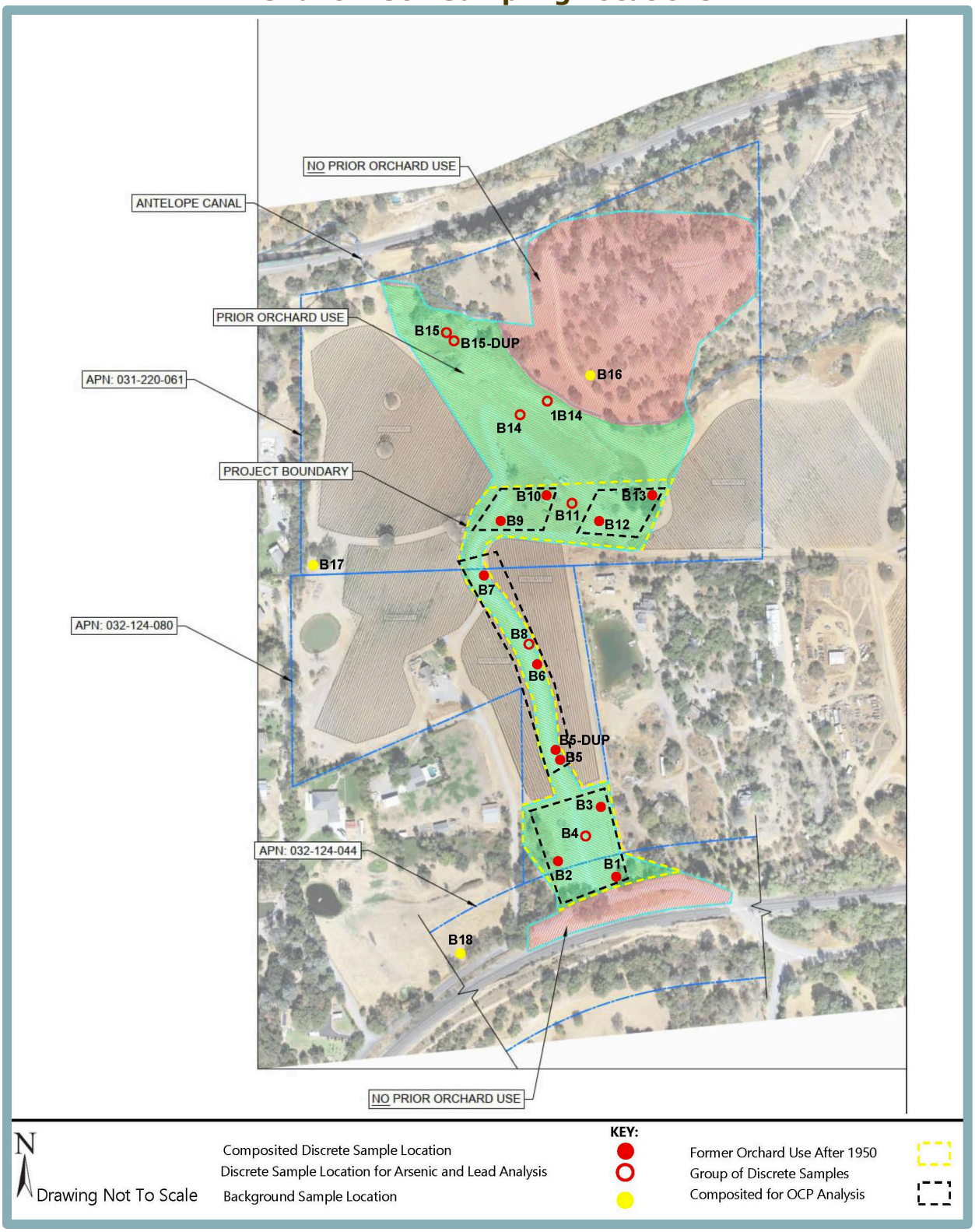
The project site conditions have been compared to the standards of significance presented above in order to determine the project's impact significance. If significant impacts are identified for the construction and operational phases of the proposed project, recommended mitigation measures have been included to reduce the identified impacts to less-than-significant levels.

11-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, the impact is *less than significant*.

A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would develop a full production winery, generally including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and associated facilities. As such, the proposed project would not be industrial in nature.

While project operations would not include any activities that would involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials, the proposed processing and fermentation of grapes, as well as lab testing, bottling, packaging, and distribution of finished products on-site, would include the use and maintenance of machinery and equipment that would require the handling, transportation, storage, and/or disposal of small quantities of hazardous materials (e.g., oil, diesel, solvents, lubricants, dry ice, etc.), which would be stored within the warehouse building in designated areas.

Figure 11-1
Shallow Soil Sampling Locations



The potential also exists for small quantities of dry ice to be stored in the grape processing sub-level under the octagon building. In addition, propane would be stored on-site in three, 1,500-gallon tanks, which would be located west of the processing/warehouse building; at the utility pad; and adjacent to the octagon building. However, all such hazardous materials would not be considerably volatile, nor would the materials be used in considerable quantity. The materials that would be used at the project site are commonly used in the wine industry, and would be transported, handled, stored, and disposed of in accordance with all applicable local, State, and federal laws regulating the uses of hazardous materials.

In addition, the process of grape fermentation inherently generates small amounts of carbon dioxide gas which, in the State of California, is not classified as a hazardous waste but is classified as an asphyxiation hazard. Therefore, all work areas within the facilities, including areas in the underground cave, would contain active ventilation systems with live monitoring and active alerts to reduce any risk to employees associated with potentially hazardous environmental conditions. Furthermore, process wastewater produced during operations would be captured and subsequently filtered to the extent necessary for ground re-application as irrigation water for adjacent vineyards and/or other uses where the application of filtered, recycled water is feasible and permissible.

Other hazardous material use on-site would be limited to landscaping products such as fertilizer and pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). However, proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. It should be noted that while existing vineyards are located within the 44.14-acre parcel area, the vineyards are not included as part of the project site and would not be disturbed by implementation of the proposed project. As such, the use of any agricultural pesticides and/or fertilizers associated with the vineyard are not included as part of the proposed project. In addition, while the proposed project would include the development and use of an on-site septic system, the system would be constructed in compliance with all State and County requirements, and would require the issuance of a septic permit by obtained from the Placer County Environmental Health Division prior to building permit issuance. As such, the proposed septic system would not create a significant hazard to the public or the environment.

Construction activities associated with implementation of the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. As such, it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, adhesives, paint, and other similar materials would be brought to the project site, used, and stored during the construction period. However, any such hazardous materials would be transported, handled, stored, and disposed of in accordance with all applicable local, State, and federal laws regulating the use of hazardous materials. To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel would not service vehicles or construction equipment outside of designated work areas.

The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section

25510(a), except as provided in subdivision (b),[9] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, PCEHD) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the PCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures. In addition, as discussed further in Chapter 12, Hydrology and Water Quality, of this EIR, preparation of and adherence to a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) during project construction would ensure impacts from potential spills of hazardous materials and/or contamination of stormwater runoff would be minimized.

Based on the above, the project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

11-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Based on the analysis below, the impact is *less than significant*.

As discussed above, the Phase I ESA prepared for the proposed project determined that the project site does not contain any readily discernable RECs, historic RECs, or controlled RECs including, but not limited to, ASTs, USTs, septic systems/cesspools, or PCB containing equipment. While the project site was historically used for agricultural purposes, the former agricultural use of the project site appears to have been limited, with widespread operations occurring prior to the large-scale use of organochlorine pesticides. Additionally, the publicly accessible areas of the proposed project would largely be limited to the northern portion of the project site, which was not historically used for agricultural purposes. Furthermore, during site development activities, near surface soils where residual agricultural chemical concentrations would most likely be present would likely be mixed with fill material or replaced with engineered fill material as part of the development activities. Therefore, Partner concluded that the possible former use of agricultural chemicals is not expected to represent a significant environmental concern.

In addition, based on the results of the Shallow Soil Sampling Report, concentrations of lead, OCPs, or arsenic above applicable screening levels were not detected within the project site soils. As discussed above, while arsenic was detected in one soil sample at a

[9] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

concentration above the DTSC Guidance background concentration of 12 mg/kg, Partner concluded that the detected concentration of arsenic in the sample is likely representative of naturally occurring arsenic concentrations present at deeper depths beneath the project site. The additional soil sample collected to the northeast did not contain arsenic at a concentration above the laboratory RL. Furthermore, the area where arsenic was detected would be capped with a concrete foundation as part of project development activities, which would prevent exposure to the naturally occurring arsenic detected in the sample. Therefore, the Shallow Soil Sampling Report concluded that significant arsenic concentrations from the former orchard operations are not present at the project site.

Based on the above, implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As a result, impacts would be considered ***less than significant***.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 20, Statutorily Required Sections, of this EIR.

11-3 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials. Based on the analysis below, the cumulative impact is *less than significant*.

As discussed, project-level impacts associated with hazardous materials related to implementation of the proposed project were found to be less than significant. Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development within the project area. Cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. Therefore, cumulative impacts associated with hazardous materials transport, storage, and use associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed project, would be ***less than significant***.

Mitigation Measure(s)
None required.

12. Hydrology and Water Quality

12. HYDROLOGY AND WATER QUALITY

12.1 INTRODUCTION

The Hydrology and Water Quality chapter of the EIR describes existing drainage patterns on the project site, current stormwater flows, and stormwater infrastructure. The chapter also evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, and increases in on- and off-site flooding. Information used for the chapter was primarily drawn from a Drainage Technical Memorandum prepared by MacKay & Somps for the proposed project (see Appendix M),[1] as well as a Public Well Impact Evaluation prepared for the proposed project by EMKO Environmental, Inc. (EMKO) (Appendix N).[2] In addition, information was drawn from the Placer County General Plan,[3] the Placer County General Plan EIR,[4] and the Horseshoe Bar/Penryn Community Plan (HBPCP),[5] the Dry Creek Watershed Coordinated Resource Management Plan (DCWCRMP),[6] and the Update to the Dry Creek Watershed Flood Control Plan.[7] It should be noted that issues associated with water supply availability are addressed in Chapter 15, Public Services and Utilities, of this EIR.

12.2 EXISTING ENVIRONMENTAL SETTING

The section below describes regional hydrology, the existing drainage patterns within the project site, including peak flows, existing water quality, and groundwater conditions.

Regional Hydrology

The project site is located in the unincorporated community of Penryn within Placer County, California. The project site is located within the Antelope Creek zone of the larger Dry Creek watershed. The Dry Creek watershed drains approximately 101 square miles.[8] The watershed begins west of Auburn and drains into Steelhead Creek. Flows from Steelhead Creek discharge to the American River, and ultimately to the Sacramento River.

According to the DCWCRMP, higher peak flows and total storm flows are not being adequately conveyed through stream channels (and structures) within the Dry Creek watershed that were originally developed (or were modified) for conveyance of lower flows. This results in localized flooding. Additionally, several areas within the watershed have degrading/unstable banks, incising streams, and are experiencing sedimentation of the streambed due, in part, to the modified flow

1 MacKay & Somps. *Drainage Technical Memorandum for Project 8*. March 4, 2022.
2 EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery*. June 25, 2022.
3 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
4 Placer County. *Countywide General Plan EIR*. July 1994.
5 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
6 Placer and Sacramento Counties. *Dry Creek Watershed Coordinated Resource Management Plan.* December 31, 2003.
7 Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan.* November 2011.
8 Placer and Sacramento Counties. *Dry Creek Watershed Coordinated Resource Management Plan*. December 31, 2003.

regime caused by increases in impervious surface area that have occurred as a result of development activities in the area.

Modification of watershed hydrology is also compounded by modification of the instream configuration by channelization, levees, dredging, structures (dams, bridges, other), and reduced floodplain area. Such modifications also result in altered stream flow where flow is faster in some areas, contributing to erosion and faster peak flow timing, but slower in other areas (behind dams and other impeding structures), contributing to flooding and sediment deposition.

Dry Creek has an extensive record of flooding and flood damage to areas within the lower portion of the creek's watershed. Historic flooding in the area occurred in 1986, 1995, and 1997. Flooding generally occurs from October through April, when soils become saturated during winter rain events followed by high intensity storm systems. The lower portion of Dry Creek is characterized by high peak flows of moderate duration. Flooding from cloudburst storms of high intensity can occur from late spring to early fall; however, runoff resulting from the summer storms tends to be significantly less in peak and volume. Though significant progress has been made towards reducing flood risks in the Dry Creek watershed through the implementation of local improvement projects, including bridge replacements, flow bypasses, building elevation projects and residential buyouts, numerous flood hazard areas and roadway stream crossings still do not have adequate capacity.[9]

Project Site and Surrounding Area Drainage

The project site currently consists of undeveloped land that is primarily vegetated with grass and trees. The Antelope Canal, which traverses the site in a generally east-west orientation, is used by Placer County Water Agency (PCWA) to convey non-potable irrigation water within Placer County. The site rises from 720 feet in the south to 928 feet in the north and has steep to moderately-steep slopes. The project site's highpoint encompasses the top of a hill, which allows runoff to drain from the site in all directions. The entirety of the project site is within Zone X, which is designated by the Federal Emergency Management Agency (FEMA) as an Area of Minimal Flood Hazard (see Figure 12-1).

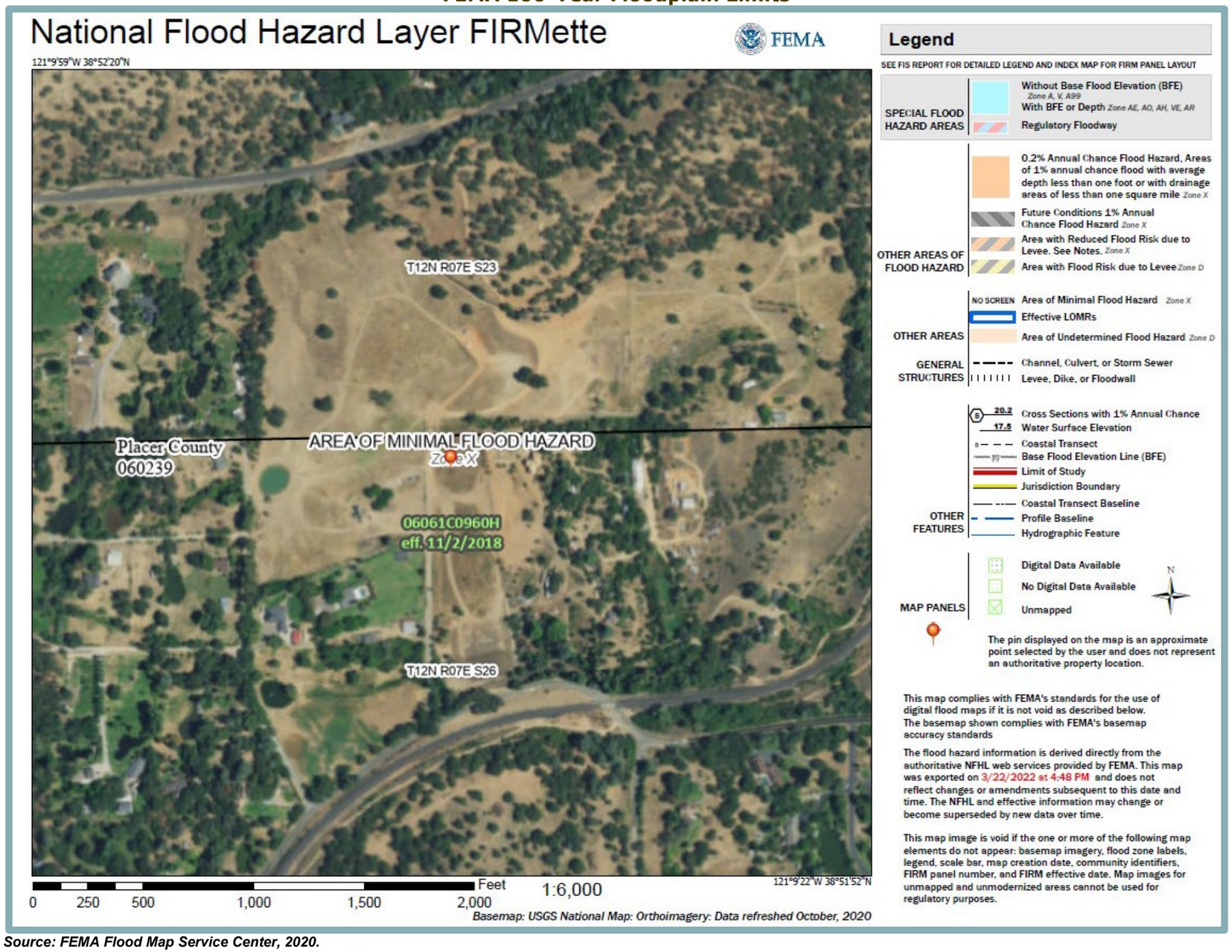
The soils within the project site are comprised of two different soil types. The majority of the site consists of U.S. Geographical Survey (USGS) Soil Type D, while the remaining portion of the site consists of USGS Soil Type B. Group D type soils have a low infiltration rate, which in turn leads to a high runoff potential. The Group B type soils have a moderate infiltration rate, which results in less runoff than the Group D type soils.

Currently, an existing storm drainage conveyance system is located in the southern part of the site, which consists of a series of pipes and field inlets that convey storm water from the eastern side of the site to the western side, where stormwater is then discharged to a natural vegetated channel.

The contributory area analyzed for the proposed project is comprised of the project site and adjacent contributory areas. The contributory area includes areas that discharge to and through the site, as well as downstream areas, to a logical discharge point for the purpose of comparing existing site discharge rates to proposed project discharge rates.

[9] Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan* [pg. ES-2]. November 2011.

Figure 12-1
FEMA 100-Year Floodplain Limits



Source: FEMA Flood Map Service Center, 2020.

Based on the hydraulic modeling conducted for the Drainage Technical Memorandum, MacKay & Somps concluded that seven drainage sheds are currently located within the contributory area. The stormwater runoff estimates for existing conditions on the project site are summarized in Table 12-1. Figure 12-2 depicts the location of each modeled drainage shed. Overall, the total watershed area being analyzed herein includes the seven drainage sheds summarized in Table 12-1, which encompass at total of 67.43 acres.

Table 12-1
On-site Peak Flow Characteristics – Existing Condition

Drainage Shed	Shed Area (Acres)	XPSWMM Node	Peak Flow, cubic feet per second (cfs)	
			10-Year, 24-hour	100-Year, 24-hour
EX01	18.11	Node045	15.1	31.7
EX02	9.93	Node033	8.4	15.8
EX03	3.54	Node021	3.0	5.8
EX04	17.51	Node015	17.8	33.5
EX05	3.64	Node037	2.6	5.5
EX06	13.10	Offsite001	8.6	18.9
EX07	1.60	Node053	2.0	3.8

Source: MacKay & Somps, 2022.

Water Quality

Activities and/or conditions that have the potential to degrade water quality include but are not limited to, construction activities and urban stormwater runoff.

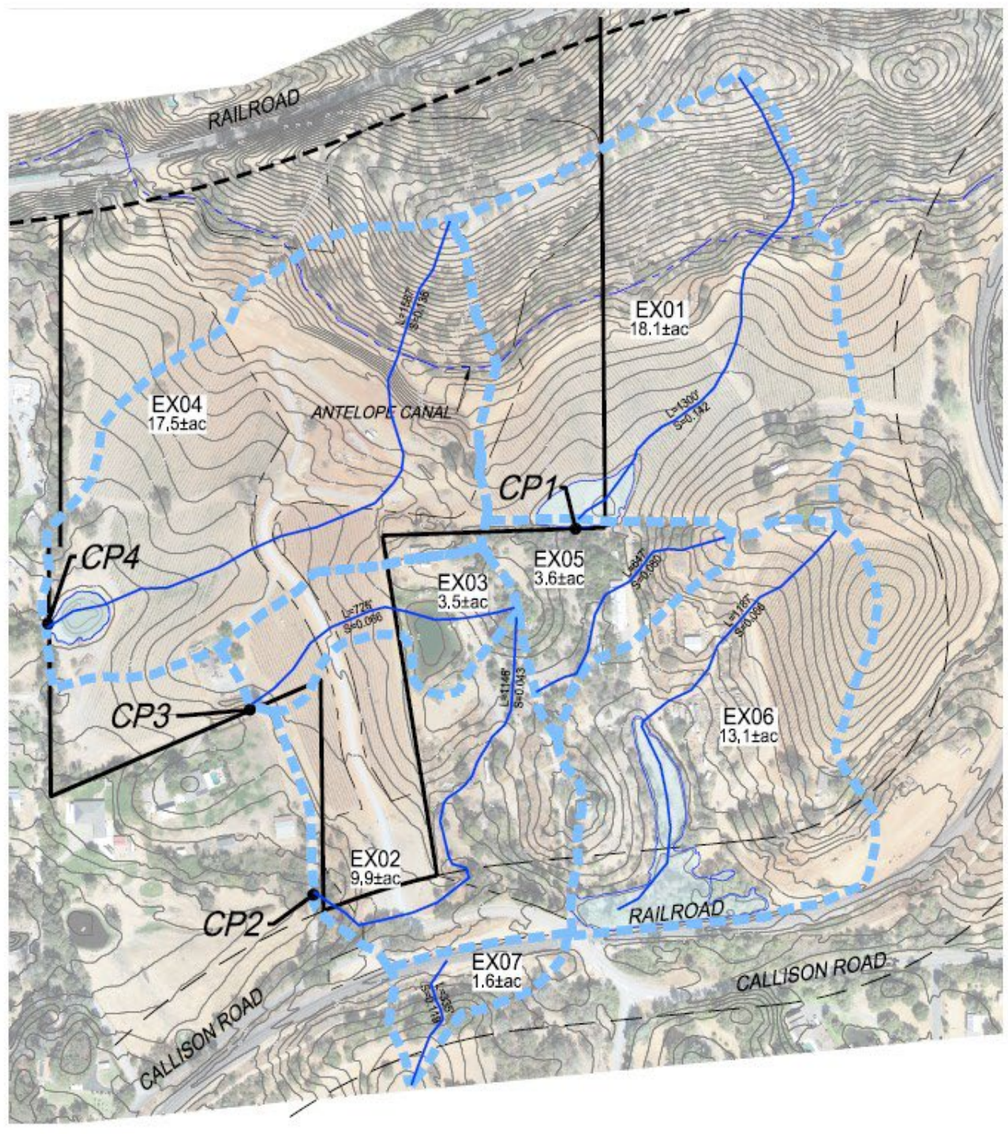
Construction activities have the potential to cause erosion and sedimentation associated with groundbreaking and clearing activities, which could cause unstabilized soil to be washed or wind-blown into nearby surface water. In addition, the use of heavy equipment during construction activities, especially during rainfall events, have the potential to cause petroleum products and other pollutants to enter nearby drainages.

Water quality degradation from urban stormwater runoff is primarily the result of runoff carrying pollutants from the land surface (i.e., streets, parking lots, etc.) to the receiving waters (i.e., streams and lakes). Pollutants typically found in urban runoff include facility maintenance and lawn-care/landscaping chemicals (insecticides, herbicides, fungicides and rodenticides), heavy metals (such as copper, zinc and cadmium), oils and greases from automobiles and other mechanical equipment, and nutrients (nitrogen and phosphorus). According to the Phase I Environmental Site Assessment prepared for the project site, the project site does not contain any known hazardous materials and past agricultural uses on the site did not result in contamination of the project site with any materials that could act as pollutants in nearby waterways.[10]

It is also noted that the parcels on which the project would be located include planted vineyards. A sedimentation basin has recently been installed north of Callison Road, near the intersection of Callison Road and Ridgeview Lane, to collect runoff from the vineyard areas.

[10] Partner Engineering and Science, Inc. *Phase I Environmental Site Assessment Report.* March 26, 2020.

Figure 12-2
Existing Drainage Shed Locations



Source: MacKay & Somps, 2022.

Groundwater

In many parts of California, groundwater typically occurs in sedimentary deposits of sand and gravel that form groundwater aquifers. However, sedimentary deposits are not present at or near the project site. Rather, groundwater encountered within wells drilled in the project vicinity occurs within fractures in granitic bedrock. Within fractured bedrock, the groundwater surface generally mimics the topography, but with the depth to water being somewhat greater along ridges and near drainage divides and somewhat shallower at lower elevations and near drainages. Thus, groundwater tends to flow from the ridge areas down toward the main drainages, such that the surface topography of the watersheds also defines individual groundwater flow zones within a fractured bedrock groundwater system. The primary source of recharge is percolation of local rainfall.

The State Department of Water Resources (DWR) Water Data Library provides groundwater level data for wells throughout the State, which can reveal trends related to groundwater levels along with short-term and long-term cycles. The nearest wells to the project site for which data are available in the Water Data Library are in Rocklin and Lincoln.[11] The data from the nearest wells indicate that groundwater levels in the region are not substantially affected by fluctuations from wet periods to drought periods. The data also show that seasonal fluctuations typically range from three feet to 10 feet between spring and fall of each year.[12]

An existing on-site public groundwater well, constructed in accordance with State and County requirements, would be used to provide potable water for the proposed project. In addition, two existing, non-public wells are located on-site, which produce a total of 90 gallons per minute (gpm) and could be used to replace the surface water supply from the irrigation canal during canal maintenance when the water supply is temporarily interrupted.

Water for the proposed project would be provided by Public Well 20-2 (WP009437). The well will be permitted through the Placer County Environmental Health Division as a source for the proposed Transient, Non-Community (TNC) public system. A TNC public water system is a system that provides water in a place, such as a small market or campground, where people do not remain for long periods of time.[13] Such public water systems require a permit from Placer County Environmental Health with concurrence from the State Water Resources Control Board (SWRCB), Division of Drinking Water. Pursuant to U.S. Environmental Protection Agency (USEPA) regulations, a public water system is required if a facility serves more than 24 people daily, 60 days or more per year.[14]

Public Well 20-2 is 120 feet deep and produces groundwater from the interval between 60 feet below ground surface (bgs) and 120 feet bgs.[15] At the time Public Well 20-2 was drilled, the well was able to produce up to 60 gpm. However, the pump that is currently installed in the well has a maximum capacity of 25 gpm.[16] As part of the Public Well Impact Evaluation prepared for the

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11 Department of Water Resources. *Water Data Library – Groundwater Level Data.* Available at: https://wdl.water.ca.gov/WaterDataLibrary/GroundWaterLevel.aspx. Accessed September 2022.
12 *Ibid.*
13 U.S. EPA. *Information about Public Water Systems.* Available at: https://www.epa.gov/dwreginfo/information-about-public-water-systems. Accessed September 2022.
14 *Ibid.*
15 EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery.* June 25, 2022.
16 Placer County Environmental Health Division. *Mima Capital LLC Water System; Proposed PWS# 3107351 Capacity Testing Alternative.* December 22, 2020.

proposed project, EMKO Environmental, Inc. reviewed Well Completion Reports (WCRs) for several nearby wells. WCRs were obtained from the California DWR.

Table 12-2 provides a summary of the WCRs reviewed for the Public Well Impact Evaluation, and Figure 12-3 shows the approximate locations of the project wells and adjacent private domestic wells.

The majority of wells listed in Table 12-2 are 200 feet deep or shallower and produced 20 gpm or more when initially installed. However, four of the wells produce five gpm or less. Two of the wells (Well 13-1 and Well 20-3) are located on vineyard property owned by the project applicant to the east of the project site and provide water for domestic purposes. As indicated in Table 12-2, the two wells were also drilled to much greater depths than other wells in the area. The well at 7429 Allen Lane is located approximately 700 feet northwest of Public Well 20-2. The well at 7411 Callison Road is located approximately 1,000 feet to the southwest of Public Well 20-2.

12.3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of hydrology and water quality under the CEQA process.

Federal Regulations

The following section includes federal environmental goals and policies relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

Federal Emergency Management Agency

The FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRMs), which are used in the National Flood Insurance Program (NFIP). The FIRMs identify the locations of special flood hazard areas, including the 100-year floodplains.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR). These standards are implemented at the State level through construction codes and local ordinances; however, these regulations only apply to residential and non-residential structure improvements. Although roadway construction or modification is not explicitly addressed in the FEMA regulations, the California Department of Transportation (Caltrans) has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the CFR). At the State level, roadway design must comply with drainage standards included in Chapters 800-890 of the Caltrans Highway Design Manual. CFR Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

Federal Clean Water Act

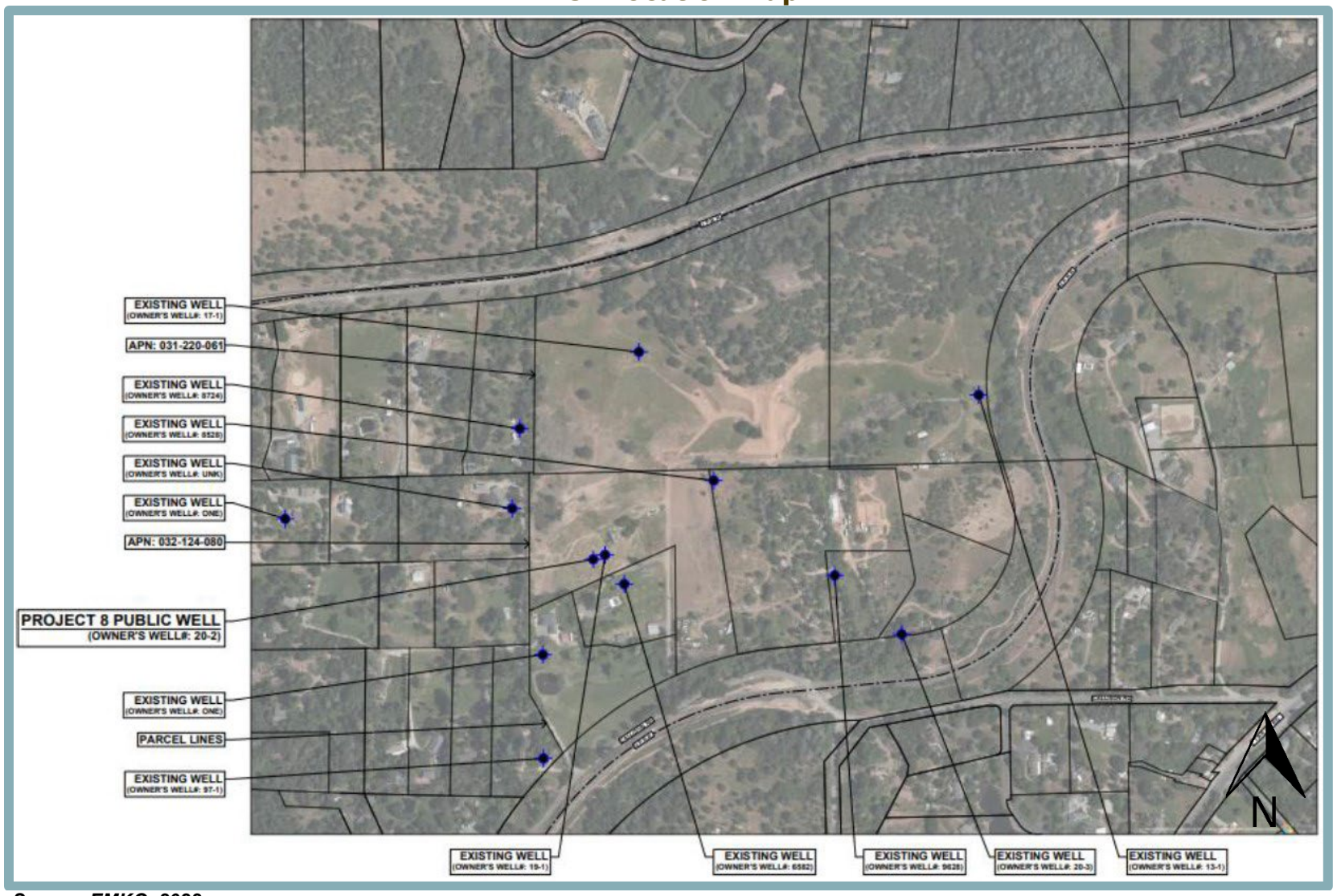
The National Pollutant Discharge Elimination System (NPDES) permit system was established in the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S.

Table 12-2
Well Completion Report Summary

Well Number	WCR Number	Address	Total Depth (feet bgs)	Production Interval (feet bgs)	First-Encountered Groundwater (feet bgs)	Static Depth to Groundwater (feet bgs)	Air Lift Test Rate (gpm)
19-1	E0340382 (2019)	7535 Ridgeview Lane	120	80-120	60	25	60
20-2	2020-015796	7535 Ridgeview Lane	120	60-120	75	25	60
17-1	2017-008327	7615 Callison Road	120	90-110	90	40	30
13-1	e0178126 (2013)	8085 (7665) Callison Road	325	65-325	55	55	2
20-3	2020-015877	7851 Callison Road	600	60-600	48	15	3
6582	Not Reported	7585 Callison Road	90	Not Reported	Not Reported	10	55
1	2004-000064	7541 Ridgeview Lane	175	45-175	37	5	20
8528	e0313614 (2016)	7715 Callison Road	200	79-200	110	60	60
9628	2021-006860	7685 Callison Road	200	82-200	95	50	25
8724	Not Reported	7429 Allen Lane	700	30-700	3	24	1.8
One	1974-000003	7301 Ridgeview Lane	100	40-60	40	10	40
97-1	1997-004878	7411 Callison Road	180	30-180	Not Reported	30	5

Source: EMKO, 2022.

Figure 12-3
Well Location Map



Source: EMKO, 2022.

Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the USEPA must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, two types of nonpoint source discharges are controlled by the NPDES program – nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the CWA directed the USEPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by USEPA that are not included in Phase I.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the SWRCB, implemented and enforced by the nine Regional Water Quality Control Boards (RWQCBs).

As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ. The General Permit requires all dischargers, where construction activity disturbs one or more acres, to take the following measures:

1. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns and stormwater collection and discharge points, and pre- and post- project topography;
2. Describe types and placement of Best Management Practices (BMPs) in the SWPPP that will be used to protect stormwater quality;
3. Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and
4. Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage, a SWPPP must be submitted to the RWQCB electronically and a copy of the SWPPP must be submitted to Placer County. When project construction is completed, the landowner must file a Notice of Termination (NOT).

State Regulations

The following section includes the State regulations relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

State Water Resources Control Board

The SWRCB and the RWQCBs are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act. The project site is situated within the jurisdictional boundaries of the Central Valley RWQCB (CVRWQCB) (Region 5). The CVRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within their jurisdiction.

Central Valley Regional Water Quality Control Board

As authorized by the Porter-Cologne Water Quality Control Act, the CVRWQCB primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The CVRWQCB implements water quality protection measures by formulating and adopting water quality control plans (referred to as basin plans, as discussed below) for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges. The CVRWQCB oversees many programs to support and provide benefit to water quality, including the following major programs: Agricultural Regulatory; Above-Ground Tanks; Basin Planning; CALFED; Confined Animal Facilities; Landfills and Mining; Non-Point Source; Spills, Leaks, Investigations, and Cleanups (SLIC); Stormwater; Total Maximum Daily Load (TMDL); Underground Storage Tanks (UST), Wastewater Discharges (including the NPDES); Water Quality Certification; and Watershed Management.

The CVRWQCB is responsible for issuing permits for a number of varying activities. Activities subject to the CVRWQCB permitting requirements include stormwater, wastewater, and industrial water discharge, disturbance of wetlands, and dewatering. Permits issued and/or enforced by the CVRWQCB include, but are not limited to, the NPDES Construction General Permit, NPDES Municipal Stormwater Permits, Industrial Stormwater General Permits, Clean Water Act Section 401 and 404 Permits, and Dewatering Permits.

Basin Plans and Water Quality Objectives

The Porter-Cologne Water Quality Control Act provides for the development and periodic review of water quality control plans (basin plans) that are prepared by the RWQCBs. Basin plans designate beneficial uses of California's major rivers and groundwater basins, and establish narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a water body (i.e., the reasons why the water body is considered valuable), while water quality objectives represent the standards necessary to protect and support those beneficial uses. Basin plans are primarily implemented through the NPDES permitting system and by issuing waste discharge regulations to ensure that water quality objectives are met.

Basin plans provide the technical basis for determining waste discharge requirements and taking regulatory enforcement actions if deemed necessary. The project site is located within the jurisdiction of the CVRWQCB. A basin plan has been adopted for the Sacramento and San Joaquin River Basin (Basin Plan), which covers all of the project area.

The Basin Plan sets water quality objectives for the surface waters in its region for the following substances and parameters: ammonia, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, radioactivity, salinity, sediment, settleable material, suspended material, taste and odor, temperature, toxicity, turbidity, and pesticides. For groundwater, water quality objectives applicable to all groundwater have been set for bacteria, chemical constituents, radioactivity, taste, odors, and toxicity.

Senate Bill 5

In 2007, the State of California set the 200-year event as the Urban Level of Flood Protection (ULOP) for the State through a series of laws included in Senate Bill (SB) 5. Along with other related legislation, SB 5 established a mandate for local governments to amend their general plans and zoning codes to be consistent with State law on floodplain management. Specifically, SB 5 requires all cities and counties within the Sacramento-San Joaquin Valley, as defined in California Government Code Sections 65007(h) and (j), to make findings related to an ULOP or the national FEMA standard of flood protection before: (1) entering into a development agreement for any property that is located within a flood hazard zone; (2) approving a discretionary permit or other discretionary entitlement, or a ministerial permit that would result in the construction of a new residence, for a project that is located within a flood hazard zone; or (3) approving a tentative map, or a parcel map for which a tentative map was not required, for any subdivision that is located within a flood hazard zone. The primary purpose of the law is to ensure that appropriate flood protection is provided in urban and urbanizing areas. Placer County has amended the County's flood management policies to bring the County into compliance with State law and provide for increased flood protection for urban areas, consistent with SB 5.[17]

A project would be subject to the requirements of SB 5 if the project would meet all of the following five criteria:

1. Located within an urban area that is a developed area, as defined by CFR Title 44, Section 59.1, with 10,000 residents or more, or an urbanizing area that is a developed area or an area outside a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.
2. Located within a flood hazard zone that is mapped as either a special hazard area or an area of moderate hazard on FEMA's official (i.e., effective) FIRM for the NFIP.
3. Located within the Sacramento-San Joaquin Valley.
4. Located within an area with a potential flood depth above 3.0 feet, from sources of flooding other than localized conditions that may occur anywhere in a community, such as localized rainfall, water from stormwater and drainage problems, and water from temporary water and wastewater distribution system failure.
5. Located within a watershed with a contributing area of more than 10 square miles.

According to the Drainage Technical Memorandum prepared for the proposed project, the project site was evaluated to ascertain the applicability of the ULOP criteria. MacKay & Somps determined that the proposed project does not meet the criterion of having watersheds with a contributing area of 10 or more square miles. Therefore, the proposed project is not subject to SB 5 legislation.

[17] Placer County. *Placer County moves to meet state flood standards for urban areas.* Available at: https://www.placer.ca.gov/news/2015/nov/placer-meets-state-flood-standards. November 5, 2015.

Local Regulations

Relevant goals and policies from the Placer County General Plan and the HBPCP, as well as various other local guidelines and regulations related to hydrology and water quality, are discussed below.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to hydrology and water quality are applicable to the proposed project.

Goal 4.E To collect and dispose of stormwater in a manner that least inconveniences the public, reduces potential water-related damage, and enhances the environment.

Policy 4.E.1 The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.

Policy 4.E.2 The County shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state.

Policy 4.E.4 The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual.

Policy 4.E.8 The County shall consider recreational opportunities and aesthetics in the design of stormwater ponds and conveyance facilities.

Policy 4.E.9 The County shall encourage good soil conservation practices in agricultural and urban areas and carefully examine the impact of proposed urban developments with regard to drainage courses.

Policy 4.E.10 The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).

Policy 4.E.11 The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.

Policy 4.E.12 The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.

Policy 4.E.13 The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.

Policy 4.E.14 The County shall require projects that have significant impacts on the quantity and quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.

Policy 4.E.15 The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm sewers, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Division of Environmental Health, Placer County Department of Public Works, Placer County Flood Control and Water Conservation District).

Goal 4.F To protect the lives and property of the citizens of Placer County from hazards associated with development in floodplains and manage floodplains for their natural resource values.

Policy 4.F.1 The County shall require that arterial roadways and expressways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.

Policy 4.F.4 The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries under fully-developed, unmitigated runoff conditions.

Policy 4.F.5 The County shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances:

a. Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and Game regulations, and Clean Water Act

provisions administered by the U.S. Army Corps of Engineers; or

b. When facilities for the treatment of urban runoff can be located in the floodplain, provided that there is no destruction of riparian vegetation.

Goal 8.B To minimize the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from flood hazards.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the Natural Resources Management Element of the HBPCP related to hydrology and water quality are applicable to the proposed project.

Goal 1 Conserve and enhance, and protect from degradation, surface and ground water supplies and adequately plan for the development and protection of these resources for future generations.

Goal 2 Safeguard and maintain natural waterways to ensure water quality, flora and fauna species diversity and unique wildlife habitat preservation.

Policy 4 Require the application of feasible "Best Management Practices" for all new development to prevent discharge of stormwater pollutants into surface and groundwater.

Policy 8 Require as part of the environmental review process, a study of the effects of development upon groundwater wherever important watersheds or the groundwater is likely to be adversely affected.

Policy 9 Reduce the negative impacts on water quality resulting from urban runoff for all commercial, industrial, and residential projects by treating such runoff before it enters intermittent or permanent streams. All feasible mitigation measures should be considered, including, but not limited to, artificial wetlands, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, or other effective means, where appropriate.

Policy 10 Wherever development may adversely affect the groundwater, require as a part of the environmental review process effective mitigation measures such as the extension of public sewers and heated domestic waters into the area, as well as other restrictions regarding building setbacks, grading activities, and removal of streamside vegetation. Wells for domestic use should only be constructed where the groundwater is of suitable quality and quantity, as determined by the Division of Environmental Health.

Policy 11 Improve water quality by eliminating existing water pollution sources and by discouraging activities which include the use of hazardous materials around wetland and groundwater recharge areas.

Policy 12	The community's canal systems should be protected from excessive contamination resulting from spillage or runoff of impurities originating from land development projects.
Policy 13	Promote water conservation through development standards, building requirements, landscape design guidelines, and other applicable policies and programs.
Policy 14	Coordinate with the Placer County Health Department and the Department of Public Works in identifying critical watershed areas and in designating Best Management Practices appropriate to those areas for use by new development projects which are undertaken in those watersheds

NPDES Small Municipal Separate Storm Sewer System (MS4) General Permit

The NPDES Municipal Stormwater Permitting Program regulates stormwater discharges from separate storm sewer systems. NPDES Municipal Stormwater Permits are issued in two phases. Phase I regulates stormwater discharges from large- and medium-sized municipal separate storm sewer systems (those serving more than 100,000 persons). Most Phase I permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase II provides coverage for smaller municipalities, including nontraditional small storm sewer systems, which include governmental facilities such as military bases, public campuses, and prison and hospital complexes. The NPDES Municipal Stormwater Permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable.

The CVRWQCB issued the NPDES General Permit No. CAS000004 Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, which became effective on July 1, 2013. An “MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying stormwater; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). Placer County is a Phase II MS4 permittee. Projects subject to the requirements of the Phase II MS4 NPDES permit must submit the appropriate Post-Construction Stormwater Plan based on the project type/development category. Regulated Projects include projects that create or replace 5,000 square feet (sf) or more of impervious surface. Regulated Projects that create and/or replace one or more acres of impervious surface are considered regulated hydromodification management projects. The proposed project would create more than one acre of impervious area, and, thus, is considered a Regulated Hydromodification Management Project subject to Phase II MS4 NPDES permit post-construction stormwater treatment requirements.

Regulated Projects are required to divide the project area into Drainage Management Areas (DMAs) and implement and direct water to appropriately-sized Site Design Measures (SDMs) and Baseline Hydromodification Measures to each DMA to the Maximum Extent Practicable (MEP). Regulated Projects must additionally include Source Control BMPs where possible. SDMs and Baseline Hydromodification Measures include, but are not limited to:

- Rooftop and impervious area disconnection;

- Porous pavement;
- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;
- Green roofs; or
- Other equivalent measures.

A detailed description of the requirements for Regulated Hydromodification Management Projects, such as the proposed project, is included in the West Placer Storm Water Quality Design Manual.[18]

Placer County Flood Control and Water Conservation District

Formed by SB 1312, the Placer County Flood Control and Water Conservation District (PCFCWCD) is responsible for regional strategies for flood control management. A Stormwater Management Manual (SWMM) was developed by the PCFCWCD to relate the policies, guidelines, and specific criteria for evaluating hydrologic conditions associated with new development projects. In 2011, the PCFCWCD published the Update to the Dry Creek Watershed Flood Control Plan, which identifies potential flooding issues associated with the Dry Creek Watershed and provides recommendations for feasible means to reduce future flood damages.[19]

Placer County Land Development Manual

Section 5 of the Placer County Land Development Manual (1996) provides supplemental design considerations for drainage facilities, and includes specific criteria used for preparation of drainage reports identical to those in the SWMM (as described above under Placer County Flood Control and Water Conservation District). The Land Development Manual states that in case of conflict with the SWMM, the most stringent requirement shall apply. The Land Development Manual also contains general information with regard to erosion control and BMPs for stormwater drainage.

Placer County Code

Chapter 15, Building and Development, of the Placer County Code includes ordinances associated with hydrology and water quality. The applicable ordinances are discussed in further detail below.

Stormwater Quality Ordinance

Article 8.28, Stormwater Quality Ordinance, is intended to ensure that Placer County is compliant with State and federal laws related to stormwater quality by enhancing and protecting the quality of waters of the State in Placer County through reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to the storm drain system. The Stormwater Quality Ordinance requires the use of BMPs to reduce adverse effects of polluted runoff discharges on waters of the State, and prohibits illicit discharges to the storm drain system. The Stormwater Quality Ordinance establishes the County's authority to adopt requirements for stormwater management, including source control requirements, to reduce pollution to the maximum extent practicable; requirements for development projects to reduce

[18] Placer County, City of Roseville, City of Lincoln, City of Auburn, Town of Loomis. *West Placer Storm Water Quality Design Manual.* April 2016.

[19] Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan.* November 2011.

stormwater pollution and erosion both during construction and after the project is complete; and enable the County to implement and enforce any stormwater management plan adopted by the County.

Grading, Erosion and Sediment Control Ordinance

Article 15.48, Grading, Erosion and Sediment Control Ordinance, of the Placer County Code regulates grading on property within the unincorporated area of Placer County in order to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff on or across the permit area; and to ensure that the intended use of a graded site is consistent with the Placer County General Plan, any specific plans adopted thereto and applicable Placer County ordinances including the Zoning Ordinance, Flood Damage Prevention Ordinance (Article 15.52 of the Placer County Code), Environmental Review Ordinance (Chapter 18 of the Placer County Code), and applicable chapters of the California Building Code. In the event of conflict between applicable chapters and Article 15.48, the most restrictive shall prevail. Part 6 of Article 15.48 sets forth design standards for grading activities such as excavation, slopes, fill soil, setbacks, and drainage.

Dry Creek Watershed Drainage Improvement Zone Ordinance

The Dry Creek Watershed Drainage Improvement Zone Ordinance (Article 15.32 of the Placer County Code) establishes a drainage improvement zone for the Dry Creek watershed. In addition, the Ordinance requires the payment of specified fees and annual assessments as a condition of new development within the watershed area; such fees and assessments are used for the installation and maintenance of roadway drainage and stormwater drainage improvements. Mitigation fees are required for new development, and the expansion of existing development, within portions of the Dry Creek watershed that impose a burden on the creeks and drainage infrastructure within the watershed by adding additional impervious surface and accelerating runoff, thereby increasing discharge rates.

Flood Damage Prevention Ordinance

Article 15.52, Flood Damage Prevention Ordinance, is intended to minimize public and private losses due to flood conditions in specific areas by provisions designed to protect human life and health; minimize the need for rescue and relief efforts associated with flooding; minimize prolonged business interruptions; minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard; provide for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; ensure that potential buyers are notified that property is in an area of special flood hazard; and ensure that those who occupy areas of special flood hazard assume responsibility for their actions. The Flood Damage Prevention Ordinance provides methods for reducing flood losses, and sets forth standards for construction in all areas of special flood hazards.

12.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hydrology and water quality. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, a significant impact would occur if the proposed project would result in any of the following:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site (see Chapter 10, Geology and Soils);
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff either during construction or in the post-construction condition; or
    - Impede or redirect flood flows;
- Place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would:
    - Impede or redirect flood flows (see Chapter 19, Effects Not Found to be Significant);
    - Expose people or structures to risk of loss, injury or death involving flooding (see Chapter 19, Effects Not Found to be Significant); or
    - Risk release of pollutants due to project inundation (see Chapter 19, Effects Not Found to be Significant); and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

As noted above, issues related to whether the proposed project would result in the following are discussed in Chapter 19, Effects Not Found to be Significant, of this EIR:

- Place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would:
    - Impede or redirect flood flows;
    - Expose people or structures to risk of loss, injury or death involving flooding; or
    - Risk release of pollutants due to project inundation.

In addition, the proposed project's impacts associated with erosion or siltation on- or off-site are discussed in Chapter 10, Geology and Soils, of this EIR.

Method of Analysis

The impacts analysis for this chapter is based primarily on the Drainage Technical Memorandum prepared for the proposed project by MacKay & Somps, as well as the Public Well Impact Evaluation prepared for the proposed project by EMKO Environmental.

Drainage Technical Memorandum

To provide an accurate model of the contributory area for the proposed project, MacKay & Somps used both the Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) and the XPSWMM Hydraulic Model to extract the applicable sheds that contribute to the project's contributory area. The Memorandum included hydrologic modeling for the proposed project (both pre-project and post-project conditions) using a combination of the HEC-HMS and the XPSWMM Hydraulic Model. The HEC-HMS was used to calculate peak flows for individual drainage sheds for the pre-construction and post-construction conditions. The 10-, and 100-year frequency storm events were analyzed.

Using the peak flows from each shed calculated through the HEC-HMS software, MacKay & Somps created a XPSWMM model of the project's contribution area. The XPSWMM model routes the flow hydrographs provided by the HEC-HMS software through the proposed stormwater conveyance system and to calculate flows and water surface elevations throughout the modeled system. Detailed calculations are provided in the Drainage Technical Memorandum prepared for the proposed project by MacKay & Somps (see Appendix M).

The County has reviewed the technical analysis prepared for the proposed project and preliminarily concurs with the methodology applied by MacKay & Somps, as well as the conclusions provided therein.

Public Well Impact Evaluation

The technical evaluation presented in the Public Well Impact Evaluation was based on available information related to climate and surface water, drilling records and well data, geology and groundwater occurrence, and well testing results.

A key parameter used to evaluate the effects of well pumping on an aquifer and adjacent wells is referred to as the transmissivity, which provides an indication of the permeability of water-bearing geologic unit by providing a measure of how easily it will transmit groundwater. The transmissivity of the fractured bedrock beneath and adjacent to the site can be estimated based on empirical relationships between test pumping rates and the amount of drawdown observed. The ratio of the pumping rate, in gpm, divided by the drawdown at that pumping rate, in feet, is referred to as the specific capacity. Multiplying the specific capacity by a constant of 1.2 yields an estimated aquifer transmissivity value, in gpm per foot (gpm/ft), which can then be converted to the more common units of feet squared per day (ft^2/d). Well production testing was conducted at two wells: Public Well 20-2, and Well 6582 to determine the specific capacity and transmissivity values of the wells. At Public Well 20-2 production testing was conducted by Peter's Drilling and Pump Service over a 76.5-hour period from January 5, 2021 to January 8, 2021. Well 6582 was test pumped by R&R Pump Service on October 22, 2002, over a two-hour period.

To evaluate the effect on groundwater levels and neighboring wells, an analytical model was then developed to calculate the drawdown of the groundwater levels that would occur due to pumping from Public Well 20-2, which would serve the proposed project. The transmissivity values calculated in the well production testing were used in the analytical model. Based on the potential

variation in project water demand, the following scenarios were simulated to identify the potential effects at neighboring wells:

A. Typical use at 3.32 gpm for 353 days per year;
B. Maximum day demand (MDD) at 4.98 gpm for 12 consecutive days; and
C. Peak hour demand (PHD) at 7.74 gpm for 6 consecutive hours.

Scenario A represents the average use scenario throughout most of the year. Scenario B represents the peak daily demand during special event and agricultural promotional events. It is anticipated that special events would be spread out throughout the year and would not occur over consecutive days. Thus, Scenario B represents a conservative over-estimate of the potential effects of the special event water demand. Scenario C represents the anticipated peak hourly demand during a special event period. The PHD generally represents a spike in demand at the peak attendance hour or other similar circumstance such that water use at that rate is not sustained beyond that peak hour. Therefore, Scenario C also represents a conservative over-estimate of the effects of short-term spikes in water demand.

Project Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

12-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction of the proposed project would include grading, excavation (including excavation associated with implementation of the proposed wine cave network), trenching for utilities, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. All such activities have the potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters downstream waterways.

Soils exposed by the aforementioned types of construction activities have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements. However, in general, impacts from construction-related activities would generally be short-term and of limited duration.

Because the proposed project would require construction activities that would result in a land disturbance of approximately 17.96 acres (greater than one acre), the project applicant would be required by the State to comply with the most current Construction General Permit requirements. Consistent with the requirements, a SWPPP would be prepared for the overall project, which would include the site map, drainage patterns and stormwater collection and discharge points, BMPs, and a monitoring and reporting framework for implementation of BMPs, as necessary. In addition, a Notice of Intent (NOI) would be filed with RWQCB.

As discussed in further depth in Chapter 10, Geology and Soils, of this EIR, the proposed project would be subject to State guidelines, Articles 8.28 and 15.48 of the Placer County Code, and Policy 6.A.5 of the Placer County General Plan, which require project implementation of BMPs designed to control erosion and other non-stormwater management and materials management BMPs. Implementation of BMPs to control erosion, and thus sediment-related pollution, is further mandated by Mitigation Measures 10-2(a) through 10-2(d) within Chapter 10 of this EIR.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. The Construction General Permit prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges (such as irrigation and pipe flushing and testing). Non-stormwater BMPs tend to be management practices with the purpose of preventing stormwater from coming into contact with potential pollutants. Examples of non-stormwater BMPs include preventing illicit discharges, and implementing good practices for vehicle and equipment maintenance, cleaning, and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include the following:

- Good housekeeping activities such as storing of materials covered and elevated off the ground, in a central location;
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance;
- Providing a central location for concrete washout and performing routine maintenance;
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management; and
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

While the final materials management BMPs to be used during construction of the proposed project are currently unknown, the project would likely include a combination of the BMP examples listed above. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association (CASQA) Stormwater BMP Handbooks and implemented by the project contractor.

In accordance with the Construction General Permit, the project site would also be inspected during construction before and after storm events and every 24 hours during extended storm events in order to identify maintenance requirements for the implemented

BMPs and to determine the effectiveness of the implemented BMPs. As a "living document", the site-specific SWPPP that would be prepared for the proposed project would be modified as construction activities progress. A Qualified SWPPP Practitioner (QSP) would ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The QSP for the project would amend the SWPPP and revise project BMPs, as determined necessary through field inspections, to protect against substantial erosion or siltation on- or off-site.

Compliance with the State NPDES Construction General Permit and Article 8.28 and 15.48 of the Placer County Code, as described above and required by Mitigation Measures 10-2(a) through 10-2(d) within this EIR, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, BMPs would be required to be designed in accordance with the CASQA Stormwater BMP Handbooks for Construction and for New Development/Redevelopment (or other similar source as approved by the Engineering and Surveying Division). Therefore, without implementation of the following mitigation measure, a ***significant*** impact related to short-term construction-related water quality could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

12-1 Implement Mitigation Measures 10-2(a) through 10-2(c).

12-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Development of the proposed project would result in the conversion of a rural area to a full production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. Such new land uses could result in new stormwater pollutants being introduced to the project area. Pollutants associated with the operational phase of the proposed project could include nutrients, oil and grease, metals, organics, pesticides, bacteria, sediment, trash, and other debris. Nutrients that could be present in post-construction stormwater include nitrogen and phosphorous resulting from fertilizers applied to landscaping. Excess nutrients could affect water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides, which are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish, can potentially enter stormwater after application to landscaped areas within the project site. Oil and grease could enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals could enter stormwater as surfaces corrode, decay, or leach. Clippings associated with landscape maintenance and street litter could be carried into storm drainage systems. Pathogens (from pets, wildlife, and human activities) have the potential to affect downstream water quality.

Development of the proposed project could also increase polluted non-stormwater runoff (e.g., wash water and landscape irrigation runoff). Such non-stormwater runoff could flow down sidewalks, parking areas, and streets, and pick up additional pollutants deposited on impervious surfaces prior to discharge into the storm drain system and surface waters. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements.

Phase II MS4 Permit Requirements

As discussed previously, the proposed project is located within the permit area covered by Placer County's MS4 Permit (NPDES General Permit No. CAS000004, Order No. 2013-0001-DWQ), pursuant to the NPDES Phase II program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Specifically, as noted above, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs and Baseline Hydromodification Measures to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on the Improvement Plans. Additional details related to hydromodification management requirements associated with the Phase II MS4 permit are discussed under Impact 12-4 below.

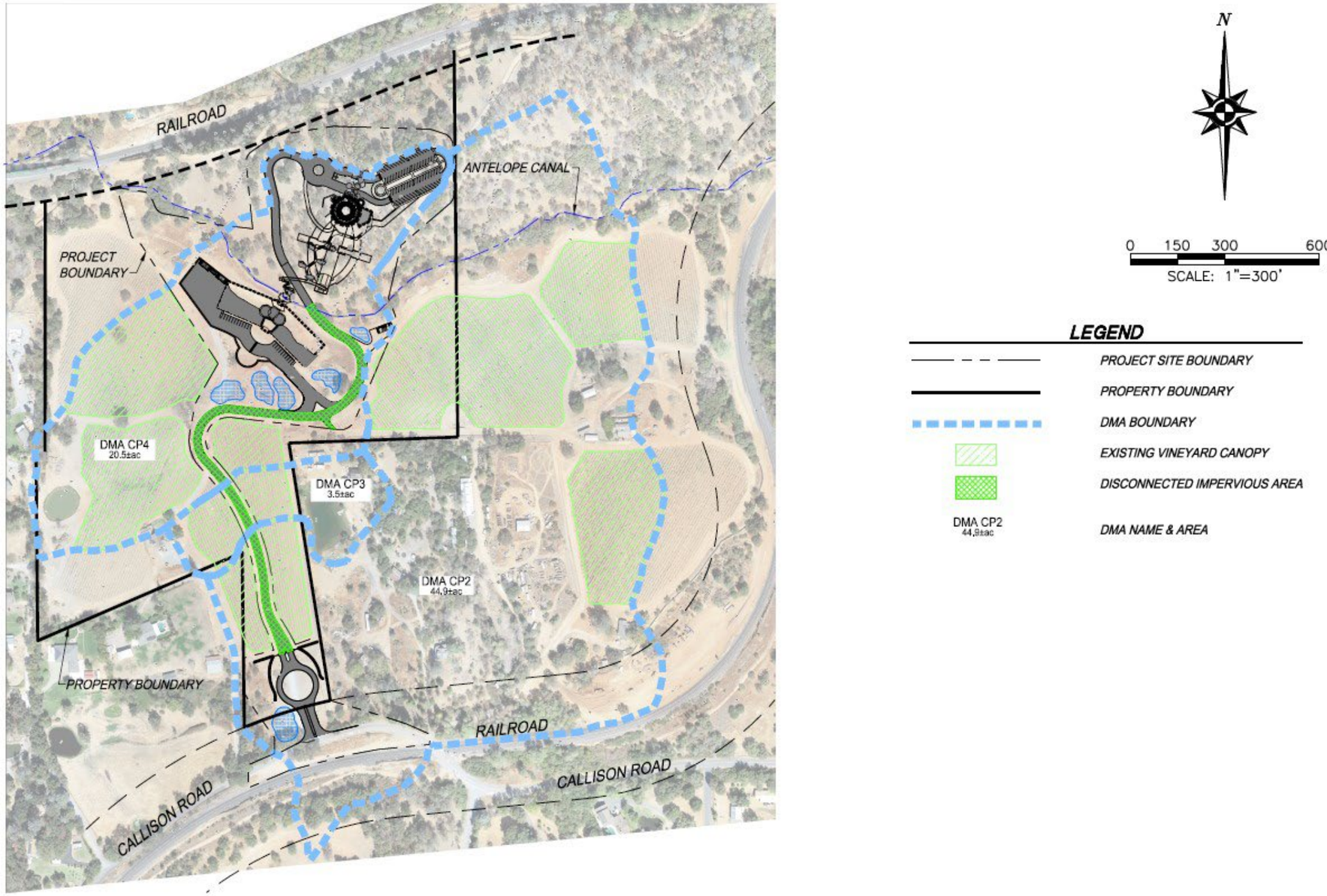
Proposed Storm Drain System

According to the Drainage Technical Memorandum prepared for the proposed project, the proposed project would include an on-site storm drain system composed of Low Impact Development (LID) components such as ditches, drop inlets, and storm drain pipes. In addition, the existing vineyards would work as an LID component to treat runoff through natural physical and biological treatment processes, and reduce the amount of runoff through infiltration and evapotranspiration. The vineyard areas provide significant LID credit for the project site, and are considered a major source of infiltration for the site.

Consistent with MS4 permit requirements and the West Placer Storm Water Quality Design Manual, the project site would be divided into three DMAs. The three DMAs include the entirety of the project site, as well as portions of the existing vineyard area that are located outside of the project site boundaries (see Figure 12-4).

Impervious surfaces proposed as part of the project include building roofs, driveways, and roadways. The proposed project would use surface and subsurface infrastructure to convey flows to storm water quality facilities and detention basins before discharging from the site. The proposed conveyance systems would include ditches, drop inlets, and storm drain pipes. Storm water outfalls would incorporate dissipation to reduce the energy of the water leaving the site as to not create or exacerbate sedimentation and erosion. The southern portion of project site would use a single-point drainage outlet for storm water runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the north side of Callison Road. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The northern portion of the project site would use a detention pond to capture and treat runoff before discharging the runoff into existing open grass-lined channels.

Figure 12-4
On-Site DMAs



Source: MacKay & Somps, 2022.

A series of ponds would be included and connected to the northerly detention pond for aesthetics purposes, though the ponds would provide additional flood control storage.

It should be noted that separate from the project, and prior to project construction, PCWA will encase a portion of Antelope Canal that is located on-site with a 48-inch high-density polyethylene (HDPE) pipe. Canal encasement will include concrete inflow and outflow structures with trash/safety racks. Encasement of the canal would help ensure that project runoff would not enter the canal.

Stormwater Quality Plans (SWQPs) prepared for proposed projects should specify source control measures to be implemented for each potential pollutant-generating activity or source present on the project site. The source control measures may include, but are not limited to, measures related to proper storage of all project materials, use of environmentally friendly materials for indoor and structural pest control, and compliance with manufacturer recommendations and regulations related to pesticide use. The source control measures should be designed consistent with the recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment, or from another equivalent manual. The proposed stormwater system would be sized to treat the first flush, which includes a majority of the larger pollutants (sand, soil, silt, grease and trash) as well as smaller pollutants (sediment, nutrient, metals, pesticides and organics). Thus, project runoff would be properly treated prior to exiting the project site, and would not pollute downstream waterways.

Maintenance and Inspection

The proposed project would include two detention basins and a series of aesthetic ponds, three of which would provide additional flood control storage. In order to ensure continued operation of the proposed detention/settling ponds, the SWQP must include detailed, site-specific inspection and maintenance procedures to be implemented by the project applicant. For example, plants and vegetation within the detention/settling ponds should be inspected monthly, and the detention/settling ponds should be inspected for the presence of standing water 72 hours after rain events. Required maintenance activity should include, but not necessarily be limited to, removal of debris from the detention/settling ponds and associated outlets. Without implementation of such measures, the detention/settling ponds could fail to ensure that polluted runoff would not enter downstream water bodies during the continued operation of the project.

Winery Process Water System

The proposed project would also include an on-site treatment process for the winery operation process water. The proposed project would use a High Strength Membrane BioReactor system to remove harmful pathogens and other harmful bacteria from process water to allow for water reuse for vineyard irrigation, landscape areas, water features/fountains, and/or dust control. The High Strength Membrane BioReactor system is Napa Green Certified and could be scaled depending on the time of the year and/or processing needs. The process water treatment system would be located adjacent to the processing/warehouse building in the turnaround area on the westerly side of the project site. The system would be above ground and would be similar in appearance to two, 20-foot cargo containers placed side by side, occupying approximately 400 sf.

The SWRCB has developed general Waste Discharge Requirements (WDRs) for wineries with activities related to producing wine or grape juice that generate winery waste and discharge process water for reuse or disposal.[20] Dischargers authorized under the general WDRs are classified into regulatory tiers based on the permitted annual facility process water design flow, which is the total volume of process water that may be discharged from the winery, including process water generated from outdoor processing areas, and measured prior to treatment. The application requirements, fees, and monitoring and reporting requirements are connected to, and commensurate with, the complexity of the discharge regulated under each tier. According to the SWRCB, wineries with process water design flows less than 10,000 gallons per year (gal/yr) are unlikely to degrade water quality and are therefore exempt from the WDRs, as long as the wineries otherwise comply with the requirements included in the SWRCB General Order. As such, based on the SWRCB General Waste Discharge Requirements for Winery Process Water, if the proposed project is determined to produce less than 10,000 gal/yr of process water, adverse impacts to water quality would not occur. If the proposed project is determined to produce more than 10,000 gal/yr of process water, compliance with the WDRs would ensure that adverse impacts to water quality would not occur..

Water Well

The public well is required to comply with state drinking water standards. Initial test results indicated compliance with applicable standards. The well will be routinely monitored to ensure continued compliance with water quality standards.

Conclusion

Based on the above, the proposed project includes site design measures to ensure that stormwater runoff is properly treated prior to discharge to downstream waterways. Thus, urban pollutants entering and potentially degrading local water quality would not be expected to occur as a result of the project. However, because a final SWQP has not been prepared, ongoing maintenance of the proposed detention/settling pond and the incorporation of proper source control measures cannot be ensured. In addition, WDRs may be required from the state for the discharge of winery process water. As a result, the proposed project could result in a ***significant*** impact related to a violation of water quality standards or waste discharge requirements or otherwise substantial degradation of surface or ground water quality during operations.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

12-2(a) *Implement Mitigation Measures 10-2(a) and 10-2(b).*

12-2(b) *The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development /*

[20] California State Water Resources Control Board. *General Waste Discharge Requirements for Winery Process Water*. January 20, 2021.

Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD)).

Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the Engineering and Surveying Division (ESD). BMPs shall be designed in accordance with the East Placer Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Contractual evidence of a monthly parking lot sweeping and vacuuming, and catch basin cleaning program shall be provided to the ESD upon request. Failure to do so will be grounds for discretionary permit revocation. Prior to Improvement Plan approval or Final Subdivision Map recordation, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

12-2(c) *The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and bio-retention planters within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek." or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD).*

ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The property owner is responsible for maintaining the legibility of stamped messages and signs.

12-2(d) *This project is located within the permit area covered by Placer County's Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System [NPDES]). Project-related storm water discharges are subject to all applicable requirements of said permit.*

The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for

pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.

The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual.

12-2(e) *According to the State of California NPDES Phase II MS4 Permit, this project is a Regulated Project that creates and/or replaces 5,000 square feet or more of impervious surface. A final Stormwater Quality Plan (SWQP) shall be submitted, either within the final Drainage Report or as a separate document that identifies how this project will meet the Phase II MS4 permit obligations. Site design measures, source control measures, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the Improvement Plans. In addition, pursuant to the Phase II MS4 permit, projects creating and/or replacing one acre or more of impervious surface are also required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2 year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, and other LID measures that result in post-project flows that mimic pre-project conditions.*

12-2(f) *Prior to final occupancy, the applicant shall provide evidence to Placer County Environmental Health Department of compliance with the SWRCB general Waste Discharge Requirements (WDRs) for wineries with activities related to producing wine or grape juice that generate winery waste and discharge process water for reuse or disposal as applicable.*

12-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Based on the analysis below, the impact is *less than significant*.

As discussed above, an existing on-site public groundwater well (Public Well 20-2), constructed in accordance with State and County requirements, would be used to provide potable water for the proposed project.

The project site is not located within a groundwater basin. Rather, groundwater within the project site is provided by a fractured hard rock aquifer. The fractured hard rock aquifer within which the project site is located is not regulated by a water quality control plan or sustainable groundwater management plan. Nonetheless, as described above, an analytical model was developed to calculate the drawdown of the groundwater levels that

would occur due to pumping from Public Well 20-2 under three scenarios (Scenario A, Scenario B, and Scenario C).

Groundwater pumping typically causes a drawdown cone to form around the pumping well. The maximum drawdown occurs at the pumping location and then decreases radially away from that point. Thus, the closer that a neighboring well is to the pumping location, the larger the drawdown that will occur at that location. The nearest non-project well to Public Well 20-2 is the private supply well at 7585 Callison Road, which is approximately 150 feet away.

Table 12-3 summarizes the drawdown results for Scenarios A, B, and C. The pumping rates for Scenarios B and C are greater than that for Scenario A. However, the duration of pumping under Scenario A is appreciably longer than for the other two scenarios. Thus, the greatest drawdown occurs under the long-term average operation of the project. The short-term drawdowns for special events could create a cumulative addition to the long-term average. However, under more realistic conditions, a single-day special event would incrementally add 0.3-foot of drawdown to the 1.6-foot long-term average, while a single peak hour would add 0.03-foot of drawdown. Thus, the peak simulated drawdown that could occur at the nearest well location at 7585 Callison Road due to long-term project operation is predicted to be 1.93 feet for short durations during the peak-hour demand during a special event. The drawdowns that would occur at wells located further than 150 feet from Public Well 20-2 would be substantially less than what is shown in Table 12-3.

Table 12-3
Projected Drawdowns at 150 Feet from Project Well

Scenario	Pumping Rate (gpm)	Duration (days)	Drawdown (Feet)	
			High T* Value	Low T Value
A. Average Rate for 353 Days	3.32	353	1.0	1.6
B. MDD for 12 Days	4.98	12	0.80	1.2
C. PHD for 6 Hours	7.47	0.25	0.14	0.11

* Transmissivity value

Source: EMKO, 2022.

Available data shows that the 7585 Callison Well is 90 feet deep, while the static depth to groundwater is 10 ft bgs, such that the well has an available static water column of 80 feet. When the pump in that well operates, the depth to water drops to 20 ft bgs, providing a water column of 70 feet. The average and maximum short-term effect from use of Public Well 20-2 for the project would add an additional 1.6 feet to drawdowns at the 7585 Callison Well, but could add as much as 1.93 feet over a short period (approximately one hour). Thus, the use of Public Well 20-2 could potentially decrease the static water column in the 7585 Callison Well by approximately two percent on a long-term basis and 2.4 percent on a short-term basis. In addition, use of Public Well 20-2 could decrease the available water column by approximately 2.3 percent to 2.8 percent when the 7585 Callison Road well is operating. However, according to EMKO, the reductions in the water

column at the nearest neighboring well are considered to be de minimis and would not impact the use of the 7585 Callison Road well.[21]

Because the magnitude of the change in groundwater levels that would occur during pumping of Public Well 20-2 would decrease radially away from the well, the effects at more distant wells would be appreciably less than what are identified for the nearest well at 7585 Callison Road. Therefore, the use of Public Well 20-2 for the project operations would not have any adverse effects on the wells of neighboring property owners.

It should also be noted that while the proposed project would result in an increase in on-site impervious surfaces, which would reduce the infiltration of groundwater as compared to existing conditions, as discussed in the Drainage Technical Memorandum, soils throughout the majority of the site have very slow infiltration rates with high runoff potential during storm events. Also, the project proposes to construct ponds to collect and store runoff from the new impervious surface which will hold water and increase infiltration. Therefore, the project site would not be considered an area of substantial contribution to groundwater recharge in the area.

Based on the above, the proposed project's impacts related to groundwater would be ***less than significant***.

Mitigation Measure(s)

None required.

12-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff either during construction or in the post-construction condition. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Currently, approximately 308 sf of impervious surfaces exist within the project site. Implementation of the proposed project would result in an increased amount of impervious surfaces related to roofs, driveways, and roadways. Upon completion of the proposed project, approximately 229,400 sf of impervious surfaces would exist on-site. As such, the project has the potential to substantially alter the existing drainage pattern of the site and increase runoff water.

It should be noted that the potential for the proposed project to result in substantial additional sources of polluted runoff, including erosion, is addressed under Impacts 12-1

[21] EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery*. June 25, 2022.

and 12-2 above. Further discussion regarding erosion is provided in Chapter 10, Geology and Soils, of this EIR.

Peak Flows and Volumes

Increases to peak runoff flows or volumes resulting from alterations to the existing drainage pattern of the site have the potential to result in exceedance of existing or planned stormwater drainage systems or flooding on- or off-site.

Currently, an existing storm drainage conveyance system is located in the southern portion of the site, which consists of a series of pipes and field inlets that convey storm water from the eastern side of the site to the western side, where runoff is then discharged to a natural vegetated channel.

The design of the project divides the site into three DMAs where development would occur. The southern portion of project site would use a single-point drainage outlet for storm water runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the north side of Callison Road. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The northern portion of the project site would use grassland filtration techniques. The northern portion of the project site would use a detention pond to capture and treat runoff before discharging the runoff into existing open grass-lined channels. A series of ponds would be included and connected to the northerly detention pond for aesthetics purposes, though the ponds would provide additional flood control storage.

To assess the changes in runoff volumes from the project site that could occur due to the proposed project, MacKay & Somps calculated the pre- and post-construction peak flow volumes for on-site drainage sheds. It should be noted that due to project development, the post-construction drainage sheds would differ from the pre-construction drainage sheds shown in Figure 12-2. Therefore, MacKay & Somps developed comparison points to assess the pre- and post-construction peak flows on-site. The comparison points ("CP") are shown on Figure 12-2. It should further be noted that the hydraulic modeling accounted for the proposed on-site detention basins. Pre- and post-construction peak flows for each comparison point are presented in Table 12-4 below.

Table 12-4
Peak Flow Characteristics: Pre- and Post-Construction Peak Flows

Comparison Point	Peak Flow, cubic feet per second (cfs)			
	10-Year, 24-hour		100-Year,24-hour	
	Pre-Project	Post-Project	Pre-Project	Post-Project
CP-1	0.0	0.0	14.3	10.6
CP-2	9.8	8.9	18.7	16.7
CP-3	3.0	1.1	5.7	2.1
CP-4	0.1	0.4	11.1	10.5

Source: MacKay & Somps, 2022.

As shown in Table 12-4, implementation of the proposed project would result in decreased peak flows for all comparison points under the 10-, and 100-year frequency storm events,

with the exception of peak flows for the 10-year storm event at CP-4. Because CP-4 is downstream of an existing storage area, under existing conditions almost the entire runoff volume from Shed EX04 during the 10-year storm event is stored. Post-construction peak flows would result in an increase of 0.3 cfs at CP-4. However, the Drainage Technical Report concluded that the increase would be considered insignificant and could be handled by the existing downstream drainage system.

Nonetheless, the proposed project would be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance, which requires new development that increases impervious surface areas within the Dry Creek Watershed to pay fees to fund regional flood control and future drainage improvement projects within the watershed. District flood control projects include the Miners Ravine Off-Channel Detention Basin and Antelope Creek Flood Control Project. These regional flood control projects were constructed to mitigate for increased runoff associated with development within the Dry Creek watershed. The fees include a one-time fee that is paid prior to start of construction and an annual fee that is included in the parcel's property tax.

Downstream Conveyance Capacity

MacKay & Somps also analyzed the potential for the proposed project to result in impacts related to altered water surface elevation (WSE) during the 10-year and 100-year storm events. Water surface elevations at each model node are summarized in Appendix B of the Drainage Technical Memorandum for the pre-project and post-project conditions during the 10-year and 100-year storm events. The 100-year flood depth is also included in Appendix B of the Drainage Technical Memorandum by comparing the 100-year water surface elevation and the ground elevation. As shown therein, during post-project conditions, NodeP049, the location of the on-site Northern Detention Basin, is the only node with a water surface elevation greater than the ground elevation. However, the water surface is 0.1 foot above the spillway elevation, and the Northern Detention Basin is designed to spill in the event of a 100-year event. Overland flow would not occur during post-project conditions for the 10-year storm event.

Pursuant to the West Placer Storm Water Quality Design Manual requirements, for local roads, the traveled way must remain clear and not convey runoff during the 10-year storm event, and the hydraulic grade line must be a minimum of one foot below building pads during the 100-year storm event. Under existing conditions, the low point in Callison Road near the entrance to the project site is at an elevation of approximately 733 feet, and the low point in the entrance road to the project site is 732 feet. As part of the proposed project, Callison Road would be raised to an elevation of 736 feet at the entrance to the project site, and the low point in the entrance road would be raised to 734 feet. Raising the low points along Callison Road would increase the freeboard of the road such that flooding would not occur for the 10- or 100-year storm events during post-project conditions, therefore satisfying the requirements of the West Placer Storm Water Quality Design Manual. Furthermore, by raising the road, the 100-year overland flow across Callison Road would be reduced to 1.3 cfs and the 10-year overland flow would be eliminated. However, the existing 12-inch culvert under Callison Road will be upsized to meet the County's SWMM requirements to an 18-inch culvert with the Callison Road improvements and the overland flow across Callison Road would be eliminated during both the 10-year and 100-year storm events.

Conclusion

Based on the above, the proposed project would result in a relatively minor increase in peak runoff relative to existing conditions. In addition, the project applicant would be required to pay fees in accordance with the Dry Creek Watershed Drainage Improvement Ordinance. Payment of such fees would help to fund regional flood control and future drainage facility improvement projects within the Dry Creek watershed. Nevertheless, a final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design. Without approval of a final drainage report, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

12-4(a) *As part of the Improvement Plan submittal process, the preliminary drainage report provided during environmental review shall be submitted in final format. The final drainage report may require more detail than that provided in the preliminary report, and will be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and off-site improvements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures. The final Drainage Report shall be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of Improvement Plan submittal.*

12-4(b) *The Improvement Plan submittal and final Drainage Report shall provide details showing that storm water run-off peak flows shall be reduced to pre-project conditions through the installation of detention facilities. Detention facilities shall be designed in accordance with the requirements of the Placer County Stormwater Management Manual that are in effect at the time of submittal, and to the satisfaction of the Engineering and Surveying Division (ESD) and shall be shown on the Improvement Plans. The ESD may, after review of the project's final Drainage Report, delete this requirement if it is determined that drainage conditions do not warrant installation of this type of facility. Maintenance of detention facilities by the property owner shall be required. No detention facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.*

12-4(c) *This project is subject to the one-time payment of drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Article 15.32, Placer County Code). The current estimated development fee is $24,246 ($1,350 per acre*

for commercial development within the Antelope Creek zone), payable to the Engineering and Surveying Division prior to Building Permit issuance. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete.

12-4(d) *This project is subject to payment of annual drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Chapter 15, Article 15.32, Placer County Code). Prior to Building Permit issuance, the applicant shall cause the subject property to become a participant in the existing Dry Creek Watershed County Service Area for purposes of collecting such annual assessments. The current estimated annual fee is $5,118.60 ($285 per acre for commercial development within the Antelope Creek zone).*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The cumulative setting for impacts related to hydrology and water quality encompasses the Antelope Creek zone of the Dry Creek watershed. Additional detail regarding the cumulative project setting can be found in Chapter 20, Statutorily Required Sections, of this EIR.

12-5 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is less than cumulatively considerable.

Cumulative impacts related to stormwater quality, groundwater, and drainage patterns are discussed separately below.

Stormwater Quality

Construction activities have the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. Runoff from additional construction sites within the project area could carry sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products, which could result in water quality degradation if runoff containing such sediment or contaminants should enter receiving waters in sufficient quantities. Thus, construction activities associated with the proposed project, in combination with construction activities associated with other reasonably foreseeable projects in the Antelope Creek zone of the Dry Creek watershed, could result in cumulative impacts related to water quality. However, all construction projects resulting

in disturbance of more than one acre of land are required to comply with the most current Construction General Permit requirements. Conformance with the Construction General Permit would require preparation of SWPPPs for all such projects, and subsequent implementation of BMPs to prevent the discharge of pollutants. Considering the existing permitting requirements for construction activity in the project area, cumulative construction within the Antelope Creek watershed would be heavily regulated and impacts related to the degradation of water quality would be minimized to the extent feasible.

Similar to the proposed project, cumulative development within the Antelope Creek zone of the Dry Creek watershed would be subject to Phase II MS4 stormwater requirements, including source control and treatment control features. Specifically, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs and Baseline Hydromodification Measures to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on Improvement Plans.

Based on the conceptual stormwater design, during operations, the stormwater runoff would be properly treated prior to discharge from the site. Thus, urban pollutants entering and potentially polluting the local drainage system would not be expected to occur as a result of the project. A final drainage report would be required with submittal of the Improvement Plans for County review and approval to substantiate the preliminary report's LID sizing calculations. In addition, pursuant to Phase II MS4 requirements, a Post Construction Stormwater Control Plan would be required for the proposed project. The project would be subject to NPDES Construction General Permit requirements, including implementation of BMPs and preparation of a site-specific SWPPP. Cumulative development projects within the project area would also be subject to Phase II MS4 stormwater requirements, as well as all County requirements related to stormwater treatment and control. Compliance with the foregoing regulations would ensure that impacts related to the alteration of drainage patterns, the discharge of pollutants, and flooding are minimized to the extent feasible.

Groundwater

Cumulative development within the project region would result in increased amounts of impervious surfaces, which would reduce the infiltration of groundwater within the project region. Although cumulative development would increase the amount of impervious surfaces in the project region, stormwater would continue to be discharged to local waterways where stormwater could infiltrate into the soil and recharge groundwater. Furthermore, the project site itself is not considered a site of substantial groundwater recharge; thus, development of the project would not result in a significant cumulative loss of groundwater recharge.

As discussed above, the project site is not located within a groundwater basin. Rather, groundwater within the project site is provided by a fractured hard rock aquifer. The fractured hard rock aquifer within which the project site is located is not regulated by a water quality control plan or sustainable groundwater management plan. In addition, the reductions in the water column at the nearest neighboring well due to use of the on-site well are considered to be de minimis and would not impact the use of the 7585 Callison

Road well. Because the magnitude of the change in groundwater levels that would occur during pumping of Public Well 20-2 would decrease radially away from the well, the effects at more distant wells would be appreciably less than what are identified for 7585 Callison Road well. Therefore, the use of Public Well 20-2 for the project operations would not have any adverse effects on the wells of neighboring property owners. While the water use associated with planned development within the HBPCP could combine with project water use to deplete fractured aquifer groundwater in the area, the project site is located in a rural area, and dense development is not proposed within the HBPCP. As a result, aquifer recharge could occur throughout the pervious surface area that is maintained in rural areas. Additionally, because large/dense amounts of development are not proposed within the project area, substantial use of groundwater would not be expected to occur such that the hard rock aquifer that supplies water to the project site is depleted. Furthermore, according to the Public Well Impact Evaluation, not all wells in the project area are interconnected. Rather, the aquifer is relatively limited in geographical extent, and a cumulative effect would not occur.

Based on the above, the project would not result in a substantial site-specific loss of groundwater recharge, and the proposed project, in combination with cumulative development within the region, would not result in a significant cumulative impact to groundwater recharge.

Drainage Patterns

The Placer County General Plan EIR concluded that the policies contained in the County's General Plan, in combination with implementation of other flood improvement plans, would reduce cumulative stormwater drainage impacts to less-than-significant levels. The proposed project would be consistent with the policies contained in the County's General Plan related to drainage. For instance, the proposed project would include BMPs during construction and operations including detention basins, vegetated swales, and various erosion prevention BMPs. Such BMPs would comply with General Plan Policy 4.E.10 and 4.E.11 regarding runoff from new developments.

As discussed above, with incorporation of the proposed LID features, peak flows exiting the site would not increase in the post-project condition. Thus, the project would be consistent with the applicable Phase II MS4 requirements for hydromodification management projects. In addition, the mitigation measures included herein require the proper sizing of proposed detention basins and/or payment into the County's Fee program. Furthermore, other projects in the Antelope Creek zone of the Dry Creek watershed would similarly be required to comply with the applicable Phase II MS4 requirements. Considering the LID features included in the proposed project and the mitigation measures included in this EIR, the proposed project's incremental contribution to potential cumulative impacts related to drainage and surface runoff would be less than cumulatively considerable.

Conclusion

Given the analysis presented in this chapter, the conclusions reached by MacKay & Somps, and the highly regulated nature of cumulative development in the project region, the project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

13. Land Use and Planning

13. LAND USE AND PLANNING

13.1 INTRODUCTION

The purpose of the Land Use and Planning chapter of the EIR is to examine the proposed project's compatibility with existing and planned land uses in the area and identify any incompatibilities with applicable land use plans, policies and regulations adopted by the County for the purpose of avoiding environmental effects. In addition, the chapter assesses the compatibility of the proposed project with the surrounding land uses. The reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from the proposed land use changes. Documents referenced to prepare this chapter include the Placer County General Plan,[1] the General Plan EIR,[2] and Horseshoe Bar/Penryn Community Plan (HBPCP).[3]

13.2 EXISTING ENVIRONMENTAL SETTING

This section describes the existing land uses on the project site and within the surrounding area at the time the NOP was published on January 13, 2022, as well as the existing plans and policies that guide the development of the project site.

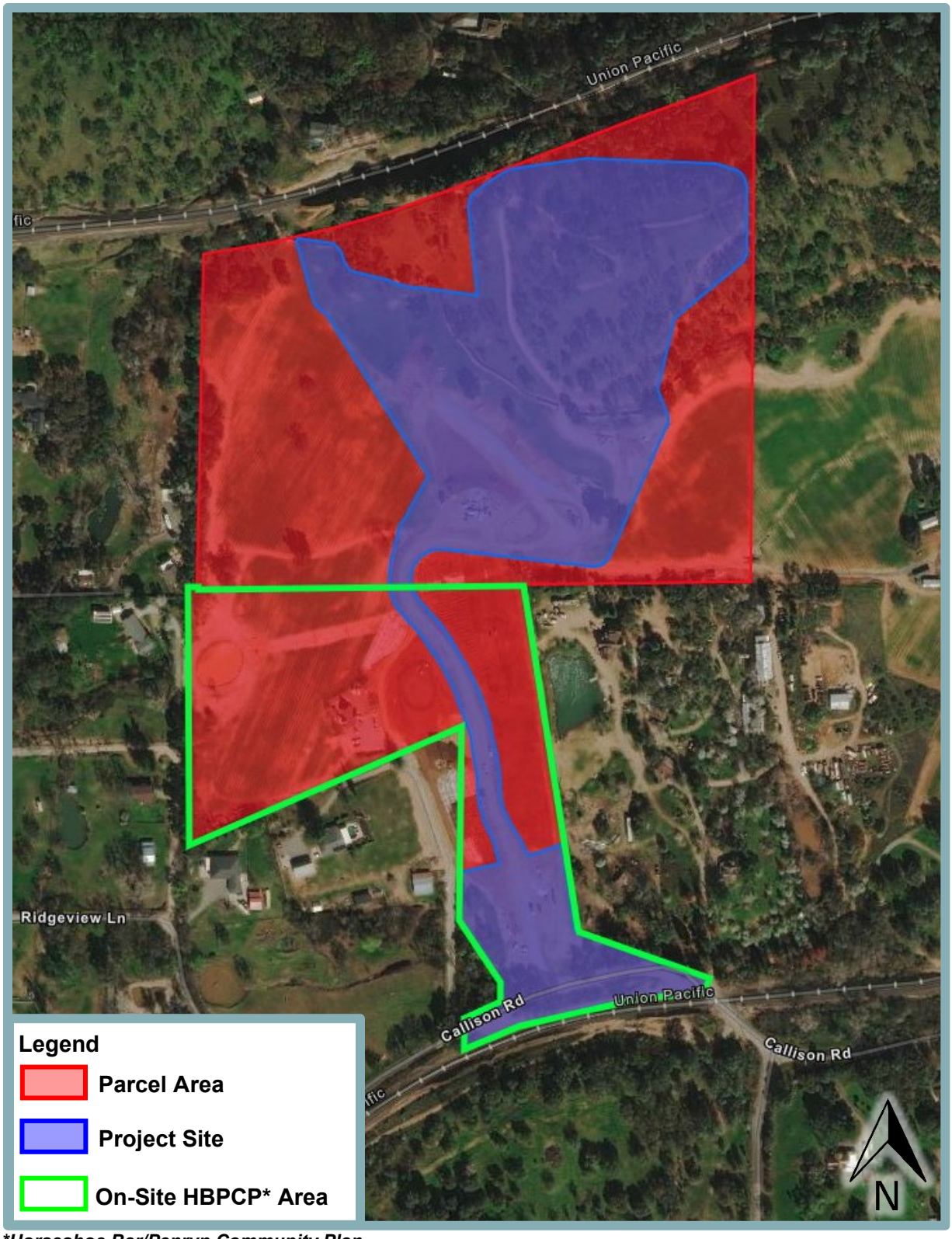
Project Site Characteristics and Surrounding Land Uses

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The project site consists of approximately 18 acres of the 44.14-acre parcel area on which the site is located. The southerly portion of the project site, through which the proposed access road would meander, is located within the HBPCP area (see Figure 13-1). The remaining portion of the project site, on which the winery facilities would be located, is outside of the HBPCP area. The project site is surrounded by oak woodlands and scattered rural residences, with Union Pacific Railroad (UPRR) tracks to the north and south.

The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The Antelope Canal, owned by Placer County Water Agency (PCWA), traverses the entire property from east to west and is fed by the Dutch Canal. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. Site elevation ranges from approximately 700 feet to 950 feet. Historically, the project site has been used for agricultural purposes (e.g., cattle grazing), though available evidence suggests that the agricultural activities did not cover the site entirely and appear to have tapered off between the early 1950s and mid-1960s.

1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan.* August 16,1994 (updated June 28, 2005).

Figure 13-1
On-Site HBPCP Boundaries



Horseshoe Bar/Penryn Community Plan

Land Use and Zoning Designations

The project site has a current land use designation of Rural Residential (1-10 Acre Minimum [Placer County General Plan] and 2.3-4.6 Acre Minimum [HBPCP]) (see Figure 13-2). As discussed above, only the southerly portion of the project site, through which the proposed access road would meander, is located within the HBPCP area. The current zoning designation for the site is Farm combining Building site 20-Acre Minimum (F-B-X 20) and Residential Agricultural combining Building site 100,000-square-foot Minimum (RA-B-100) (see Figure 13-3).

The land uses to the north and east of the site have a Placer County General Plan land use designation of Rural Residential 1-10 Acre Minimum and a zoning designation of Farm combining Building site 4.6-Acre Minimum (F-B-X 4.6), and F-B-X 20, respectively. The land uses to the south and west of the project site have a HBPCP land use designation of Rural Residential 2.3-4.6 Acre Minimum and a zoning designation of RA-B-100 2.3-Acre Minimum.

Land Use Designation Definitions

The following section provides definitions of the project site land use designations noted above, as summarized from the Placer County General Plan and the HBPCP.

Placer County General Plan Designation

The Placer County General Plan defines the above noted land use designation as follows:

Rural Residential (RR)

The Rural Residential designation is applied to areas generally located away from cities and unincorporated community centers, in hilly, mountainous, and/or forested terrain and as a buffer zone where dispersed residential development on larger parcels would be appropriate, and compatible with smaller-scale farming and ranching operations. Typical uses allowed include: detached single-family dwellings and secondary dwellings; agricultural uses such as crop production and grazing, equestrian facilities, and limited agricultural support businesses such as roadside stands, farm equipment and supplies sales; resource extraction uses; various facilities and services that support residential neighborhoods, such as churches, schools, libraries, child care and medical facilities; and parks and necessary public utility and safety facilities.

HBPCP Designations

The HBPCP defines the above noted land use designation as follows:

Rural Residential (RR)

The Rural Residential designation is intended to provide for "country living" including hobby farms, animal husbandry, and other rural pursuits. Parcel sizes range from 2.3- to 4.6-Acre Minimums. New development within the land use designation is expected to maintain and promote the rural, agricultural character of the area and protect existing natural resources within the plan area, including native trees and vegetation, stream corridors, wetlands, topography, and the Folsom Lake watershed. Zoning designations permitted within the Rural Residential designation include single-family residential, agricultural residential, farm, and open space.

Zoning Designation Definitions

The Placer County Zoning Code (Title 17 of the Placer County Code) defines the above noted zoning designations as follows:



Figure 13-2
Project Area Land Use Designations

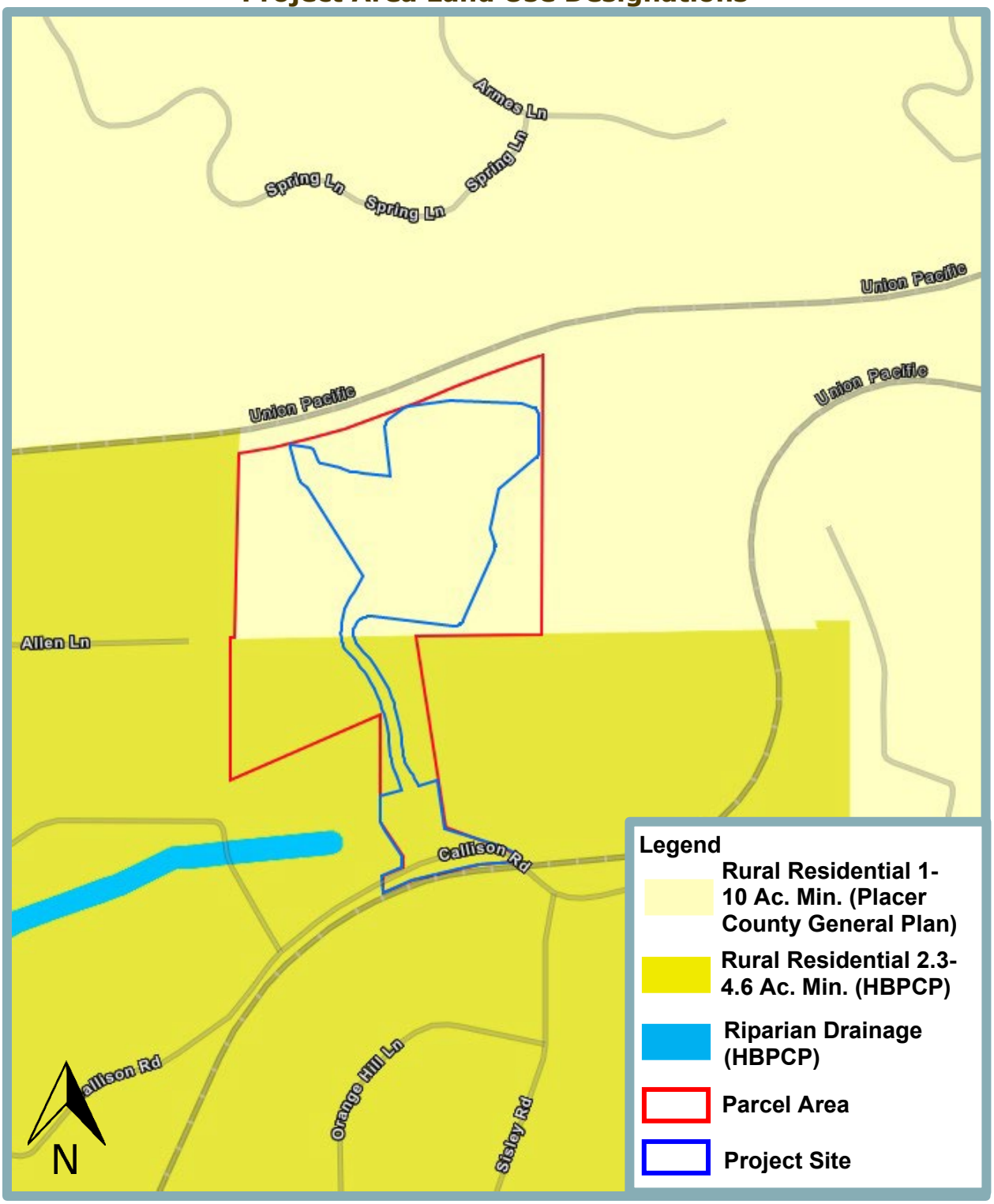
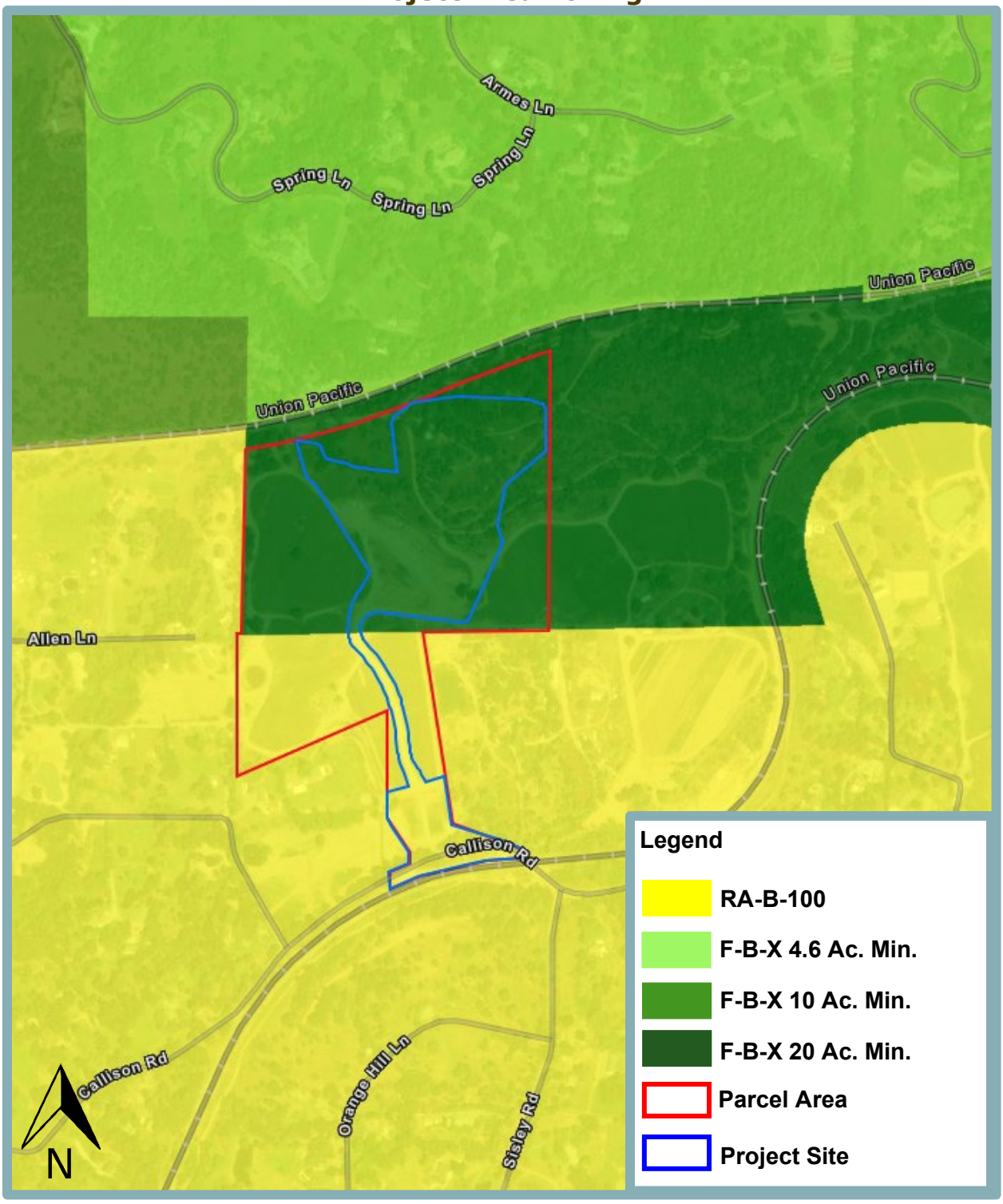


Figure 13-3
Project Area Zoning



Farm (F)

The purpose of the F zone district is to provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. Minimum lot sizes within the F zone district are typically 200,000 square feet (sf) (4.6 acres) but may be smaller with a -B Combining District designation.

Residential-Agricultural (RA)

The purpose of the RA zone district is to stabilize and protect the rural residential characteristics of the area to which it is applied and to promote and encourage a suitable environment for family life, including agricultural uses.

Building Site (-B)

The purpose of the -B combining district is to provide for different parcel sizes in new subdivisions than would otherwise be required by an applicable zone district, based upon special characteristics of the site or area to which the combining district is applied, including but not limited to sensitive environmental characteristics, limited resource capacities, and community character.

13.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to land use and planning are not applicable for this analysis. However, the existing State and local laws and regulations are listed below, as applicable.

State Regulations

The following are applicable State regulations related to land use and planning.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131, provides that economic or social information may be included in an EIR, but those economic or social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

Local Regulations

The following are the local regulations and standards relevant to the CEQA review process with respect to land use and planning. Specific goals and policies from the County General Plan and HBPCP are listed in Table 13-1 at the end of this chapter.

Placer County Winery and Farm Brewery Ordinance

Section 17.56.330 of the Placer County Code is comprised of the County's Winery and Farm Brewery Ordinance. The purpose of the ordinance is to provide for the orderly development of wineries and farm breweries within agricultural zoning districts and certain commercial, industrial, and residential zoning districts within the County, and to encourage the economic development of the local agricultural industry, provide for the sampling and sales of value-added products, and protect the agricultural character and long-term viability of agricultural lands. The Winery and Farm Brewery Ordinance includes regulations required for wineries and farm breweries within the County such as permit requirements, allowed uses, and development and operational standards.

Sacramento Area Council of Governments (SACOG)

SACOG is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the region and the corresponding Metropolitan Transportation Improvement Program (MTIP). The MTIP identifies short-term projects (seven-year horizon) in more detail.

Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2020 MTP/SCS was adopted by the SACOG board on November 18, 2019.[4] The MTP/SCS is a long-range plan for transportation improvements in the region and provides a 20-year transportation vision and corresponding list of projects. The plan is based on projections for growth in population, housing, and jobs. SACOG determines the regional growth projections by evaluating baseline data (existing housing units and employees, jobs/housing ratio, and percent of regional growth share for housing units and employees), historic reference data (based upon five- and ten-year residential building permit averages and historic county-level employment statistics), capacity data (General Plan data for each jurisdiction), and current MTIP data about assumptions used in the most recent MTP/SCS. SACOG staff then meets with each jurisdiction to discuss and incorporate more subjective considerations about planned growth for each area. Finally, SACOG makes a regional growth forecast for new homes and new jobs, based upon an economic analysis provided by a recognized expert in order to estimate regional growth potential based on market analysis and related economic data, which is incorporated into the MTP/SCS.

13.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to land use and planning. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, a significant impact would occur if the proposed project would result in any of the following:

- Physically divide an established community;
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;
- Result in the development of incompatible uses and/or the creation of land use conflicts; or
- Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration.

Method of Analysis

This chapter analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies. Environmental impacts resulting from the proposed project are discussed in the respective environmental categories. This discussion complies with Section 15125(d) of the CEQA Guidelines, which requires that EIRs

[4] Sacramento Area Council of Governments. *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted November 18, 2019.

discuss inconsistencies with adopted local plans as part of the environmental setting. The ultimate determination of consistency rests with the Placer County Board of Supervisors.

Compatibility with Existing Uses

The proposed project is evaluated for compatibility with the existing land uses adjacent to the project site. The evaluation considers the existing type and intensity of uses in the project vicinity and those proposed for the project site. The analysis assumes the construction and implementation of the proposed project within the existing environment to determine if the project is compatible with those existing uses surrounding the project site.

Consistency with the Applicable Land Use Regulations

The proposed project is examined for consistency with the Placer County General Plan and HBPCP based on the relevant policies contained within the document. The project's consistency with the Placer County Zoning Ordinance, in particular, the Winery and Farm Brewery Ordinance, is also discussed.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

13-1 Physically divide an established community. Based on the analysis below, the impact is *less than significant*.

A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community or isolate an existing land use. The proposed project would develop a full production winery on a site that currently contains an irrigation canal, agricultural-related uses, including dirt roadways and graded surfaces, and oak woodland and grassland habitats. The project site is surrounded by oak woodlands and scattered rural residences, with UPRR tracks to the north and south.

The proposed project would not interrupt any existing or proposed transportation route that provides connectivity in the project vicinity and would not require removal of any existing homes. Additionally, the area surrounding the project site is largely undeveloped; thus, the project site is not located within or adjacent to an established community that would be physically divided following the development of the proposed project. Therefore, the proposed project would not physically divide an established community, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

13-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the impact is *less than significant*.

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as follows, "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." Therefore, the standard for analysis used in this EIR is in general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the Placer County General Plan policies or other County plans and policies is ultimately the decision of the Placer County Board of Supervisors. Furthermore, although CEQA analysis may identify some areas of general consistency with County policies, the County has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies.

The Placer County Zoning Ordinance carries out the policies of the Placer County General Plan by classifying and regulating the uses of land and structures within the County, consistent with the General Plan. The project site is zoned F-B-X 20 and RA-B-100. The proposed project would consist of a full-production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. The majority of the winery facilities, including the warehouse building and the octagon building, would be located within the F-B-X 20 zoned portion of the site. According to Table 2 of the Winery and Farm Brewery Ordinance (Section 17.56.330 of the Placer County Code), wine tasting facilities in agricultural zoning districts are allowed with a zoning clearance. For the County's zoning clearance regulations, see Section 17.06.050 of the Placer County Code. Despite the zoning clearance, the proposed project would require approval of a Conditional Use Permit (CUP) to allow for the operation of an Accessory Use – Restaurant, and to allow for an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events.

The project also includes a request for a Zoning Text Amendment to add height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330. This ZTA, along with a project-specific CUP, would allow for the octagon building to be constructed at a height of 75 feet. As a result, the following language would be added to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330 (E), Development and Operational Standards:

> **Height Limit Exceptions.** Notwithstanding the Site Development Standards for the applicable zone or Section 17.54.020 (Height limits and exceptions), a structure for a winery, tasting room, or accessory use-restaurant under this section may exceed the prescribed height limit for the applicable zone if the additional height is authorized through a conditional use permit (CUP) process that includes an analysis of visual impacts including photo simulations.

Given the proposed height limit exception requirements that would be added to Section 17.56.330 (E) of the Placer County Code, the proposed project would also require

approval of a CUP to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

As shown in Table 13-1, Placer County General Plan and HBPCP Policy Discussion, at the end of this chapter, the project would be generally consistent with the applicable policies outlined in the General Plan and the HBPCP. Further, the project is generally consistent with and implements all other applicable plans and policies, such as the Placer County Conservation Program (PCCP). Further detail regarding the proposed project's consistency with the PCCP is included in Chapter 7, Biological Resources, of this EIR. Approval of the CUP and Zoning Text Amendment are discretionary actions subject to approval by the Placer County Board of Supervisors. Should the Placer County Board of Supervisors approve the requested entitlements, the project would be rendered consistent with the County's General Plan and Zoning Ordinance. From a policy perspective, Table 13-1 at the end of this chapter demonstrates that the proposed project would be generally consistent with the intent of the objectives and policies included in the Placer County General Plan and the HBPCP adopted for the purpose of avoiding or mitigating an environmental effect.

Based on the above, the proposed project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (including the policies discussed in Table 13-1), and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

13-3 Result in the development of incompatible uses and/or the creation of land use conflicts. Based on the analysis below, the impact is *less than significant*.

The determination of compatibility of land uses typically relies on a general discussion of the types of adjacent uses to a proposed project and whether any sensitive receptors are located either on the adjacent properties or associated with the proposed project. Surrounding existing land uses consist of the following:

North:	UPRR railroad tracks, undeveloped land, and rural residential homes.
South:	Rural residences and UPRR railroad tracks.
East:	Rural residences and UPRR railroad tracks.
West:	Rural residences.

The proposed project would consist of a full-production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. As noted above, areas surrounding the project site consist predominantly of rural residential development, agricultural uses, and scattered oak woodlands.

The Placer County General Plan establishes Land Use Buffer Zone Standards for several types of development including agriculture/timberland, industrial/residential, and public

facility buffer zone requirements.[5] The buffers are intended to separate incompatible land uses from surrounding areas, such as land uses where noise associated with vehicles and equipment could be substantial, the use of hazardous materials such as in manufacturing processes occurs, or where truck traffic and otherwise heavy traffic volumes occur. As discussed in Chapter 5, Agriculture and Forestry Resources, of this EIR, the General Plan does not require buffer zones for wine-production facilities, winery tasting rooms, or restaurants, and such uses are not considered sensitive land uses.

In addition, because the proposed project would be located on approximately 17.96 acres of the 44.14-acre parcel area, the parcel area that is not included as part of the project site would provide a buffer between the residential uses in the project vicinity and the proposed winery. Furthermore, Callison Road and the UPRR tracks would provide a buffer between the project site and the residences to the south, and the UPRR tracks would provide a buffer between the project site and the residences to the north. Therefore, while the proposed project is not required by the County to adhere to any Land Use Buffer Zone Standards, the existing land bounding the project site would provide buffers between the proposed development and the existing land uses to the east, west, and south of the project site.

As discussed in Chapter 4, Aesthetics, of this EIR the proposed project would introduce additional sources of light and/or glare to the project region in the form of exterior light sources. However, pursuant to Section 17.54.070(A)(2)(i) of the Placer County Code, the proposed project would be subject to compliance with all applicable standards set forth by the Placer County Design Guidelines related to light pollution. Additionally, the proposed project would implement Mitigation Measure 4-3, which would require the submittal of a lighting plan for the project to Placer County for review and approval.

According to the Environmental Noise & Vibration Assessment (Noise Assessment) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Chapter 14, Noise, of this EIR), the proposed project would not produce noise levels exceeding the performance standards established by Placer County at existing noise-sensitive uses. As such, the proposed project would not result in the development of incompatible uses from a noise perspective.

As discussed in Chapter 16, Transportation, of this EIR, without incorporation of a left-turn lane at the Taylor Road/Callison Road intersection designed in accordance with applicable Placer County standards, the proposed project could substantially increase hazards to vehicle safety due to a geometric design feature or incompatible uses. However, Mitigation Measure 16-3 would require incorporation of a left-turn lane designed in accordance with applicable standards and requirements, which would reduce the potential impact to a less-than-significant level.

While the project would introduce a more intensive use when compared to existing conditions, the proposed project would be required to comply with design recommendations as a result of Planning Commission review. The project would be landscaped along the project frontages and would retain, and protect during construction activities, existing native trees within the project site where possible. Where new plantings

[5] Placer County. *Countywide General Plan Policy Document, Part 1, Land Use/Circulation Diagrams and Standards* [pg. 19]. August 1994 (updated May 2013).

are proposed, the project would use native plants that are indigenous and adapted to the region. Project architecture would be designed to be compatible with the rural residential character of the area. Examples include the use of Penryn's history (e.g., railroad, mining, and agricultural industries) as inspiration for the design of proposed architectural features (e.g., rammed earth wall construction allowing local soils to inform the aesthetic, octagon building exterior modeled after steam locomotive sand dome, and weathered steel incorporated into building facades and site features). Therefore, the proposed project would not introduce an incompatible use to the project area or create land use conflicts, and would not result in any adverse environmental effects associated with such.

Based on the above, the proposed project would not result in the development of incompatible uses and/or the creation of land use conflicts, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

13-4 Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration. Based on the analysis below, the impact is *less than significant*.

CEQA does not require an analysis of social issues unless a direct link to the physical environment exists. One way that social issues are typically handled in CEQA documents is to consider the potential for a project to change the socioeconomics of a community, which could lead to physical blight. In recent years, the State courts have identified the term urban decay as the physical manifestation of a project's potential socioeconomic impacts and specifically identified the need to address the potential for urban decay in environmental documents for large retail projects. The leading case is *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, in which the court set aside two environmental impact reports for two proposed large retail projects that would have been located fewer than five miles from each other.

The proposed project would consist of a full-production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities in a portion of the County that is primarily characterized by rural residential development and undeveloped land. The operation of the proposed winery would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery primarily in the form of small agricultural promotional events. As such, while the proposed project would include the development of an accessory restaurant, the proposed use would be intended to serve the winery and would not have an effect on other businesses in the area. In addition, seating would be limited within the accessory restaurant, with a maximum of 32 patrons allowed for made-to-order lunch and dinner service. Thus, the proposed project would not develop retail uses that would result in increased vacancy rates or abandonment of commercial spaces in the project vicinity, resulting in urban decay.

Based on the above, the proposed project would not cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A cumulative analysis of land use is not included herein because land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts related to such issues is whether the project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Such a conflict is site-specific, and, thus, is only addressed on a project-by-project basis. As shown in Table 13-1 of this chapter, the proposed project would be generally consistent with relevant policies in the Placer County General Plan and the HBPCP.

Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy		Project Consistency
Placer County General Plan		
Land Use Element		
1.H.5.	The County shall require development within or adjacent to designated agricultural areas to incorporate design, construction, and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses, except as may be determined to be necessary or inappropriate within a Specific Plan as part of the Specific Plan approval.	The operation of the proposed winery would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery primarily in the form of small agricultural promotional events. The proposed winery would be developed on approximately 17.96 acres of the 44.14-acre parcel area, and would avoid disturbance of the existing vineyards within the parcel area, which are also owned by the project applicant. As such, the proposed project would be designed to protect the existing agriculture in the project vicinity and minimize conflicts with adjacent agricultural uses.
1.K.3.	The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.	The existing vegetation and vineyard areas located within the parcel area on which the project site is located would act as a buffer and would provide a transition between the vegetation of the proposed project and the adjacent rural residential areas.
1.K.4	The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines: a. Limit cuts and fills; b. Limit grading to the smallest practical area of land; c. Limit land exposure to the shortest practical amount of time; d. Replant graded areas to ensure establishment of plant cover before the next rainy season; and e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.	Mitigation Measure 10-2(c) of this EIR requires that all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the Engineering and Surveying Division (ESD) concurs with said recommendation. Pursuant to the mitigation requirements, the applicant must also revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans.
1.K.6.	The County shall require that new development on hillsides employ design, construction, and maintenance techniques that:	The project site features gently rolling terrain, with a hilltop in the northern portion of the site. The processing/warehouse building would be located at the base of the hillside on which the octagon building would be constructed.

Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy	Project Consistency
a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns; b. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas; c. Minimize risk to life and property from slope failure, landslides, and flooding; and, d. Maintain the character and visual quality of the hillside.	Additionally, an approximately 900-sf outdoor, covered utility pad would be built into the hillside, approximately 40 feet south of the Antelope Canal, near the eastern boundary of the project site. As discussed in Chapter 18, Wildfire, of this EIR, wildfire risks due to slope would be less-than-significant. In addition, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Mitigation Measures 10-2(a) and 10-2(b) and 10-2(c), included in Chapter 10, Geology and Soils, as well as Mitigation Measures 12-2(b) through 12-2(e), included in Chapter 12, Hydrology and Water Quality, would ensure the project includes erosion and sediment control measures, including temporary vegetation, sufficient to stabilize disturbed areas. In addition, impacts related to slope failure, landslides, and flooding were determined to be less-than-significant. As discussed in Chapter 10, Geology and Soils, of this EIR, the subsurface medium at the location of the proposed wine cave consists of hard and solid rock with few to no fractures, which would be considered structurally suitable for construction of an underground cave. Therefore, issues related to unstable soils, such as cave collapse, would not occur. Furthermore, as discussed in Chapter 4, Aesthetics, of this EIR, and shown in the photo simulations prepared for the proposed project, the character and quality of the view from Callison Road generally remains that of a hillside with tree canopies and grasslands. However, the project site is currently undeveloped and consists primarily of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The proposed project would result in changes in the public views from Callison Road/Ridgeview Lane, the commuter rail line, and the Callison Road/Main Entry viewpoint. Therefore, the EIR determined that a significant and unavoidable impact would occur related to views of the hillside where the octagon building is proposed to be located.

Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy		Project Consistency
1.O.3.	The County shall require that all new development be designed to be compatible with the scale and character of the area. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that: a. They do not silhouette against the sky above ridgelines or hilltops; b. Roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline; c. They fit the natural terrain; and d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g., avoid high contrasts).	As discussed in Chapter 4, Aesthetics, of this EIR, the proposed project would be consistent with the current land use designation of the site, and the structures would be designed according to the standards set in the Placer County Design Guidelines. However, the proposed octagon building would extend above the tree canopy and, thus, would silhouette against the sky above the hilltop. In addition, the octagon building would be constructed at a height of 75 feet, which is 39 feet above the maximum allowable height of 36 feet for the project site. The exterior of the octagon building would include a living façade comprised of an exoskeletal structure covered with plant life to blend in with the surrounding environment. Approximately one third of the roof of the warehouse building would be a "green roof," consisting of a layer of vegetation planted over a waterproofing system. In addition, Mitigation Measure 4-2 requires the project applicant submit a Final Landscape Plan for review and approval by Placer County. Nonetheless, because the proposed project would change existing public viewsheds of the site from predominantly undeveloped, rural landscapes to a winery with new structures on a hillside, the project would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, impacts related to such were determined to be significant and unavoidable.
1.O.9	The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.	Mitigation Measure 4-3 requires the project applicant to submit and implement a lighting plan for the project to Placer County for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association.
4.A.2	The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met: a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and	As discussed in Chapter 15, Public Services and Utilities, of this EIR, adequate public services and utilities would be available to serve the proposed development. Water would be supplied to the project site and the greater parcel area by an on-site well, and a new septic system would be developed on-site to handle wastewater demands generated by the proposed project. As such, the proposed project would not require a connection to the existing County water supply or sewer service facilities.

Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy		Project Consistency
	b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.	
Public Facilities and Services Element		
4.B.1	The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.	Water would be supplied to the project site by an on-site public well, and a new septic system would be developed to handle wastewater demands. Therefore, the proposed project would not increase demand for such facilities/services in the County, as all demand generated by the proposed project would be accommodated by on-site infrastructure. Additionally, the proposed project would be subject to payment of applicable fees used to fund fire protection services, sheriff protection services, and other public services, as well as development impact fees. Specifically, Penryn Fire Protection District (PFPD) and Newcastle Fire Protection District (NFPD) collect development impact fees on new construction within the districts, which goes towards the districts' Mitigation Fund, used to purchase capital equipment. Currently, the PFPD's Fire Facilities Fee is $1.33 per square foot of retail/commercial development, and NFPD's Fire Facilities Fee is $1.21 per square foot of retail/commercial development. In addition, the proposed project would pay the required Auburn Union School District impact fees, which is $0.40 per square foot for commercial development, as well as the County's Capital Facilities Fees, which are used to construct or expand a range of facilities, including jails, office space, libraries, health labs, and clinics. The payment of Traffic Impact Fees along with other development impact fees levied by the County is intended to fund and sustain necessary improvements resulting from new development, such as road widening, signalization of intersections, and bridge replacements.
4.B.3	The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development	See response to Policy 4.B.1, above.

Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy		Project Consistency
	within city limits to mitigate impacts on Countywide facilities and services.	
4.C.1	The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.	As discussed in Chapter 15, Public Services and Utilities, of this EIR, according to the 20-year evaluation of the proposed water system's supply capacity included in the Public Water System Technical Report prepared for the proposed project, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. In addition, the public well has already been permitted by the State and Placer County as a transient non-community water system under PWS #3107351 (Well Permit #9437).
4.C.2	The County shall approve new development based on the following guidelines for water supply: a. Urban and suburban development should rely on public water systems using surface supply. b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted. c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.	See response to Policy 1.K.4, above.
4.C.6	The County shall promote efficient water use and reduced water demand by: a. Requiring water-conserving design and equipment in new construction; b. Encouraging water-conserving landscaping and other conservation measures; c. Encouraging retrofitting existing development with water-conserving devices; and, d. Encouraging water-conserving agricultural irrigation practices.	As discussed in Chapter 15, Public Services and Utilities, of this EIR, the proposed project would comply with the County's Water Efficient Landscape Ordinance (WELO), which would be ensured during the design review process through submission of a landscape package to the County for review and approval.
4.E.1	The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.	Natural storm water drainage systems do not currently exist on-site; however, the proposed project's drainage system would incorporate natural



Table 13-1
Placer County General Plan and HBPCP Policy Discussion

Policy		Project Consistency
		elements into the system design. The southern portion of project site would use a single-point drainage outlet for storm water runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the south side of Callison Road. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The northern portion of the project site would use grassland filtration techniques. The proposed on-site storm drain system would be composed of Low Impact Development (LID) components. Furthermore, the existing vineyards on the greater parcel area would work as an LID component to treat runoff through natural physical and biological treatment processes, and reduce the amount of runoff through infiltration and evapotranspiration. The vineyard areas provide significant LID credit for the project site, and are considered a major source of infiltration for the site.
4.E.4	The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual.	This is required by Mitigation Measure 12-4(a) of the EIR.
4.E.9	The County shall encourage good soil conservation practices in agricultural and urban areas and carefully examine the impact of proposed urban developments with regard to drainage courses.	See response to Policy 1.K.4, above.
4.E.10	The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).	This is required by Mitigation Measures 12-2(a) through 12-2(e) of the EIR.
4.E.11	The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.	As discussed under Impact 12-4 of the Hydrology and Water Quality chapter and required by Mitigation Measure 12-4(b), implementation of the proposed project would result in decreased peak flows for all comparison points under the 10- and 100-year frequency storm events, with the exception of peak flows for the 10-year storm event at Comparison Point-4 (CP-4). However, the Drainage Technical Memorandum prepared for the

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Policy		Project Consistency
		proposed project concluded that the increase at CP-4 would be considered insignificant and can be conveyed within the downstream drainage system. In addition, the proposed project would be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance, which requires new development that increases impervious surface areas within the Dry Creek Watershed to pay fees to fund future drainage improvement projects within the watershed.
4.E.12	The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.	The project design maintains, to the extent feasible, natural site drainage conditions. See response to Policy 4.E.1, above.
4.E.13	The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.	This is required by Mitigation Measure 12-4(a) of the EIR.
4.E.17.	The County shall strive to protect domestic water supply canal systems from contamination resulting from spillage or runoff.	The project site is bisected by the Antelope Canal, which is owned by PCWA, and traverses the entire property from east to west. The majority of the on-site construction would be designed to avoid disturbance of the canal. In addition, prior to operation of the proposed project, and separate from project construction activities, a segment of Antelope Canal in the northeast potion of the site would be encased, which would further help to protect the canal. The canal would be encased in a 48-inch high density polyethylene (HDPE) pipe, which would be reinforced with a concrete outflow structure, concrete inlet structure, and a concrete slab under the proposed driveway. Both ends of the encased segment of the canal would include trash/safety racks to prevent contamination. Furthermore, as discussed under Impact 12-2 of the Hydrology and Water Quality chapter, the on-site stormwater drainage system would be designed such that stormwater runoff would not flow into the Antelope Canal. Rather, the southern portion of project site would use a single-point drainage outlet for storm water runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the north side of Callison Road. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The northern portion of the project site would use a detention pond to capture and treat runoff before discharging



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Policy		Project Consistency
		the runoff into existing open grass-lined channels. A series of ponds would be included and connected to the northerly detention pond for aesthetics purposes, though the ponds would provide additional flood control storage.
4.F.4	The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries under fully-developed, unmitigated runoff conditions.	The entirety of the project site is within Zone X, which is designated by the Federal Emergency Management Agency (FEMA) as an Area of Minimal Flood Hazard.
4.I.9	The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.	As discussed in Chapter 15, Public Services and Utilities, of this EIR, final improvement plans for the proposed project would be subject to review by PFPD and NFPD as part of the County's approval process in order to ensure compliance with fire and safety standards.
Natural Resources Element		
6.A.6	The County shall require development projects to comply with the municipal and construction stormwater permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) Phase I and II programs and the State General Municipal and Construction permits. Municipal requirements affecting project design and construction practices are enacted through the County's Stormwater Quality Ordinance. Separate construction permits may be required by and obtained through the State Water Resources Control Board.	BMPs to protect streams from on-site erosion during construction, and from urban pollutants, will be required through Mitigation Measures 10-2(a) and 10-2(c), as well as Mitigation Measures 12-2(b) through 12-2(e). Evidence of compliance with the State Water Resources Control Board requirements will be required through Mitigation Measure 12-2(f).
6.A.7	All new development and redevelopment projects shall be designed so as to minimize the introduction of pollutants into stormwater runoff, to the maximum extent practicable, as well as minimize the amount of runoff through the incorporation of appropriate Best Management Practices.	See response to Policy 6.A.6, above.
6.D.8.	The County shall require that new development preserve natural woodlands to the maximum extent possible.	As discussed in Chapter 7, Biological Resources, of this EIR, the project site contains approximately 6.2 acres of blue oak woodland, less than 0.1-acre of interior live oak woodland, 0.1-acre of mixed oak woodland, and less than 0.1-acre of urban woodland. The proposed project would impact approximately 4.2 acres of the blue oak woodland and less than 0.1-acre of mixed oak woodland. However, the proposed project is located within the Placer County Conservation Program (PCCP) Plan Area A: Foothills of the

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Policy		Project Consistency
		PCCP, and the proposed project is a Covered Activity requiring PCCP authorization. As such, Mitigation Measure 7-5 would ensure the proposed project complies with PCCP General Condition 3 for land conversion fee obligations for permanent land conversion. Development fees would be applied for the proposed project's vegetation community impacts, in accordance with PCCP guidelines.
6.F.6.	The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.	Analysis of air quality impacts is provided in Chapter 6, Air Quality and Greenhouse Gas Emissions, of this EIR. As discussed therein, all air quality impacts were determined to be less than significant, and, therefore, mitigation measures to reduce air quality impacts would not be required.
6.F.7	The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.	See response to Policy 6.F.6, above.
6.F.9	In reviewing project applications, the County shall consider alternatives or amendments that reduce emissions of air pollutants.	Chapter 21, Alternatives Analysis, of this EIR includes an analysis of air quality and greenhouse gas (GHG) impacts associated with project alternatives.
Agricultural and Forestry Resources Element		
7.A.3.	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.	Currently, the project site is undeveloped, and existing vineyards are located within the parcel area surrounding the project site. The proposed project would encourage continued agricultural activities on the project site by developing a full-production winery.
7.A.10.	The County shall facilitate agricultural production by allowing agricultural service uses (i.e., commercial and industrial uses) to locate in agriculturally-designated areas if they relate to the primary agricultural activity in the area. The County shall use the following guidelines to analyze the suitability of a proposed agricultural service use: a. The use will not adversely affect agricultural production in the area; b. The use supports local agricultural production; c. It is compatible with existing agricultural activities and residential uses in the area;	The operation of the proposed winery would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery primarily in the form of small agricultural promotional events. The proposed winery would be developed on 17.96 acres of the 44.14-acre parcel area, and would avoid disturbance of the existing vineyards within the parcel area. Water and sewer lines would not need to be extended into the site because water would be supplied to the project site by an on-site public well, and a new septic system would be developed to handle wastewater demands. Therefore, all demand generated by the proposed project would be accommodated by on-site infrastructure.

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	d. The use will not require the extension of sewer or water lines; and, e. It will not result in a concentration of commercial or industrial uses in the immediate area.	
7.B.1	The County shall identify and maintain clear boundaries between urban/suburban and agricultural areas and require land use buffers between such uses where feasible. These buffers shall occur on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.	As discussed in Chapter 5, Agriculture and Forestry Resources, of this EIR, the General Plan does not require buffer zones for wine-production facilities, winery tasting rooms, or restaurants, and such uses are not considered sensitive land uses. In addition, because the proposed project would be located on 17.96 acres of a 44.14-acre parcel area, the parcel area that is not included as part of the project site would provide a buffer between the residential uses in the project vicinity and the proposed winery. Furthermore, Callison Road and the UPRR tracks would provide a buffer between the project site and the residences to the south, and the UPRR tracks would provide a buffer between the project site and the residences to the north. The closest residence to the disturbance area is located approximately 150 feet south of where construction activities would occur. Therefore, while the proposed project is not required by the County to adhere to any Land Use Buffer Zone Standards, the existing land bounding the project site would provide buffers between the proposed development and the existing land uses to the east, west, and south of the project site.
7.C.4.	The County shall permit a wide variety of promotional and marketing activities for County-grown products in all zone districts where agricultural uses are authorized.	See response to Policy 7.A.10, above.
Health and Safety Element		
8.B.1.6	The County shall ensure new development projects incorporate design strategies and features to reduce the area of impervious surfaces.	While the proposed project would result in an increase in on-site impervious surfaces, the proposed storm drainage system would include LID components, including the use of the existing vineyards to treat runoff through natural physical and biological treatment processes. The storm drain system would also include a detention/settling pond and grassland filtration techniques. The proposed project would also be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance, which

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Policy		Project Consistency
		requires new development that increases impervious surface areas within the Dry Creek Watershed to pay fees to fund future drainage improvement projects within the watershed.
8.C.1.1	The County shall require that new development meet State, County, and local fire district standards for fire protection, including the California Building Standards Code, the International Wildland-Urban Interface Code, and the Placer County Municipal Code as applicable	As discussed in Chapter 18, Wildfire, of this EIR, the proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including Placer County Code Sections 15.04.510 and 15.04.520, which serve to adopt and amend, as applicable, the California Fire Code (CFC). The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new commercial buildings 3,600 sf and larger. In addition, Chapter 7A of the California Building Code (CBC) includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a wildland-urban interface (WUI) zone. Examples of the Chapter 7A standards include use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. Furthermore, Placer County Code Section 9.32.160 sets forth hazardous vegetation abatement standards for improved parcels with which the proposed project would be required to comply. As part of compliance, the project would be required to maintain a 100-foot defensible space around all proposed structures. Furthermore, Mitigation Measure 18-2 would require the submittal of a Vegetation Management Plan (VMP) to the California Department of Forestry and Fire Protection (CAL FIRE), PFPD, Placer County Fire District (PCFD), and Placer County Community Development Resource Agency for review and approval.
8.C.1.6	The County shall require all new development projects with land classified as state responsibility areas (Public Resources Code Section 4102), land classified as very high fire hazard severity zones (VHFHSZs; Section 51177), or within areas defined as a "wildland urban interface" (WUI), to prepare a long-term comprehensive fuel reduction and management program, including provisions for multiple points of ingress and egress to improve evacuation and emergency response access and adequate water infrastructure for water supply and fire flow, and fire equipment access.	The project site is located within a FHSZ in a SRA and is also within a WUI zone. Therefore, the proposed project would be subject to CBC Chapter 7A standards. Placer County Code Section 9.32.160 sets forth hazardous vegetation abatement standards for improved parcels with which the proposed project would be required to comply. As part of compliance, the project would be required to maintain a 100-foot defensible space around all proposed structures. Pursuant to Placer County Code Section 15.75.040, landscaping would include irrigation scheduling in accordance with the County's WELO, which would ensure the proposed vegetation is sufficiently watered to not result in excessively dry fuel sources. While the

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Policy		Project Consistency
		proposed project would include a gated entry from Callison Road, the gated access point would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code. In addition, Mitigation Measure 18-2 would require the submittal of a VMP to CAL FIRE, PFPD, PCFD, and Placer County Community Development Resource Agency for review and approval.
Noise Element		
9.A.1.	New development of noise-sensitive uses shall not be permitted where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 (see Table 14-4 of this EIR) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1.	Existing non-transportation noise sources that would adversely affect the proposed on-site uses do not exist within the project vicinity. Furthermore, the proposed project would not include any noise sensitive land uses.
9.A.2	Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 (see Table 14-4 of this EIR) as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.	See response to Policy 9.A.1, above.
9.A.5.	Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 9-1 (see Table 14-4 of this EIR) at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.	As discussed in Chapter 14, Noise, of this EIR, a Noise Assessment was prepared by BAC to identify any significant noise or vibration impacts that would occur as a result of the proposed project. According to the Noise Assessment, the proposed project would not produce noise levels exceeding the performance standards of Table 9-1 of the General Plan (Table 14-4 of this EIR) at existing noise-sensitive uses surrounding the project site. As such, noise mitigation would not be required for the proposed project.
9.A.6	The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3 (see Table 14-5 of this EIR).	The noise analysis conducted for the project determined that existing and future projected traffic noise levels, including noise from project traffic, would not exceed the applicable noise increase standards at off-site residential receptors.

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Policy		**Project Consistency**
HBPCP		
Community Development Element		
Land Use		
Policy c	Individual sites shall be landscaped attractively so as to integrate the entire development visually with the overall natural qualities of the planning area. Appropriately landscaped buffer areas of adequate size shall be provided to shield adjacent residential developments from commercial or industrial activities. Residential areas shall be protected from noise, unsightliness, odor, and other nuisances. Indigenous materials shall be used where practical.	See response to Policy 1.K.3, above.
Policy t	Buildings shall be of a size and scale conducive to maintaining the rural atmosphere of the Plan area. The architectural scale of non-residential buildings, as differentiated from size, shall be more similar to that of residential buildings than that of monumental buildings. Non-residential buildings shall generally be of small or moderate size and, where groups of buildings are used, connected by plazas, terraces, porches, arcades, canopies or roofs, to provide a pleasant environment as well as safety and shelter to pedestrians.	See response to Policy 1.O.3, above.
Policy y	Night lighting visible from the exterior of buildings and the project's boundaries, shall be limited to that necessary for security, safety, and identification. All night lighting shall be low intensity and shielded from the view of passing traffic and adjacent residential areas. Lighting shall not be directed in an upward manner nor beyond the boundaries of the parcel on which the structure is located.	See response to Policy 1.O.9, above.
Public Facilities and Service Systems		
Policy 2	Ensure that adequate services will be available for proposed development before granting approvals.	See response to Policy 4.A.2, above.
Policy 5	As new development is proposed, consider adopting mitigation measures to reduce impacts on local services (i.e., schools, parks, fire, police, general government services, etc.).	See response to Policy 4.B.1, above.

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Policy		Project Consistency
Fire Protection		
Policy 7	Ensure that all new developments comply with the California Department of Forestry fire safe regulations, County development standards, and other local fire agency standards regarding the adequate provision of water supply and emergency vehicle accessibility.	See responses to Policy 4.I.9, Policy 8.C.1.1, and Policy 8.C.1.6, above.
Community Noise		
Policy a	New development of noise-sensitive uses shall not be allowed where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 8 (see Table 14-4 of this EIR) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 8 (see Table 14-4 of this EIR).	See response to Policy 9.A.1, above.
Policy b	Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table I as measured immediately within the property line of lands designated for noise-sensitive uses.	See response to Policy 9.A.1, above.
Policy c	Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 8 (see Table 14-4 of this EIR) at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. The requirements for the content of an acoustical analysis are given by Table 10 (see Table 14-6 of this EIR).	See response to Policy 9.A.5, above.
Policy d	The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9 (see Table 14-5 of this EIR).	See response to Policy 9.A.6, above.
Policy e	New development of noise-sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 9 (see Table 14-5), unless the project design includes effective mitigation measures to reduce noise in outdoor	See response to Policy 9.A.8, above.

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Policy		Project Consistency
	activity areas and interior spaces to the levels specified in Table 9 (see Table 14-5).	
Policy I	Require that wherever noise mitigation measures are identified as necessary to insure an acceptable noise environment, that these measures are implemented as a part of project approval.	See response to Policy 9.A.5, above.
Community Design Element		
Policy 2	Sites should be designed and developed to provide safe and convenient access for pedestrians, bicyclists, and motorists, and where appropriate, equestrians.	As discussed in Chapter 16, Transportation, of this EIR, based on the rural location of the project site, the proposed project is unlikely to generate appreciable pedestrian, bicycle, or transit activity by guests. Nonetheless, the proposed project would not physically disrupt an existing pedestrian facility, nor interfere with implementation of a planned pedestrian facility. In addition, the proposed project would not result in a significant increase in bicyclists on a facility that does not have adequate bicycle facilities, such that conflicts between bicyclists and other travel modes would be likely to increase. Finally, as the project access is not adjacent to any transit facility, the project would not result in increased potential for safety conflicts involving transit vehicles and other modes of travel.
Policy 13	Night lighting, visible from the exterior of a building and the project's boundaries shall be limited to that necessary for security, safety, and identification. All night lighting shall be low intensity and screened from view of passing traffic and adjacent residential areas. Lighting shall not be directed in an upward manner nor beyond the boundaries of the parcel on which the structure is located	See response to Policy 1.O.9, above.
Policy 15	To the maximum extent possible, all structures, including residences, should complement and blend in with the natural setting of the planning area, and to this end the following principles shall be incorporated into the project design: a. The visual impact of the structure shall be mitigated either through reduction of building bulk, increased setbacks, or introduced hillside structures shall be designed to step down the natural hillside in order to achieve a low building profile and minimize grading. b. Structures may be located within existing tree covered areas and still be consistent with slope, geologic and	See response to Policy 1.O.3, above.

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Policy		Project Consistency
	related conditions and the need to preserve natural terrain and locally unique or especially beautiful wooded areas. c. Largely bare slopes and sparsely wooded ridges visible from large portions of the planning area should be kept free of structures to the maximum extent possible. d. If development does take place on highly visible barren slopes or ridges, it must be unobtrusive and designed to maintain the character of the natural setting.	
Natural Resources Management Element		
Natural Resources		
Policy 3	Require slope analysis maps during the environmental review process or at the first available opportunity of project review, as needed, to assess future grading activity, building location impacts, and road construction impacts.	As discussed in Chapter 10, Geology and Soils, of this EIR, a Geostructural Investigation was prepared for the proposed project. The Geostructural Investigation included an analysis of impacts related to slope and, as discussed therein, indications of slope instabilities such as landslides, sloughing, tension cracks or hummocky terrain on the site's ground surface do not exist. Thus, the project site was determined to not contain any unstable slopes. In addition, a site-specific Slope Stability Study for Septic Leach Field was prepared to evaluate if the future installation of the on-site septic system with a leach field on the East zone slope would adversely affect slope stability. At the time of the field visit conducted by Youngdahl Consulting Group, surface-level indications of slope instability were not identified across the East zone leach field area. In addition, based on the modelled slope stability scenarios, the analysis revealed that the slope at the proposed leach field area in the East zone would remain stable under saturated conditions.
Hydrology and Water Quality		
Policy 4	Require the application of feasible "Best Management Practices" for all new development to prevent discharge of stormwater pollutants into surface and groundwater.	See response to Policy 6.A.6, above.
Policy 9	Reduce the negative impacts on water quality resulting from urban runoff for all commercial, industrial, and residential projects by treating such runoff before it enters intermittent or permanent streams. All feasible mitigation measures should be considered,	See response to Policy 4.E.10, above.

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	including, but not limited to, artificial wetlands, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, or other effective means, where appropriate.	
Policy 12	The community's canal systems should be protected from excessive contamination resulting from spillage or runoff of impurities originating from land development projects.	See response to Policy 4.E.17, above.
Vegetation		
Policy 2	The natural resources and features of a site proposed for development shall be the predominant planning factor that determines the scope and magnitude of the development. Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any land development project, paying particular attention to its protection and the preservation of existing native vegetation.	See response to Policy 6.D.8, above.
Policy 3	Site specific surveys by qualified professionals shall be required prior to development to delineate wetlands in the Plan area. All development proposals involving wetlands shall be coordinated with the California Department of Fish and Game, Army Corps of Engineers and U.S. Fish and Wildlife Service. The "no-net-loss" policy (2:1 replacement) of requiring preservation of all wetland sites, or preservation of priority wetlands and compensation for wetland losses, shall continue to be provided. Wherever artificial means are utilized in wetlands management, insure that appropriate biota-oriented vector control management strategies are incorporated (i.e. through the use of minnows predatory upon mosquitoes).	As discussed in Chapter 7, Biological Resources, of the EIR, a site-specific Aquatic Resources Delineation Report (ARD) was prepared for the proposed project by Madrone Ecological Consulting to delineate any wetlands and/or other aquatic resources within the project site. The only aquatic resources identified within the project site as part of the ARD are a segment of the Antelope Canal within the northern portion of the site and a small roadside drainage ditch within the southern portion of the site along the south side of Callison Road. The Antelope Canal is a man-made, concrete-lined channel completely devoid of vegetation and conveys irrigation water from several sources including the Yuba River, Bear River, and the American River to properties in Penryn, Loomis, and unincorporated portions of western Placer County. The canal would not be impacted by the proposed project. The small roadside drainage ditch along the south side of Callison Road is an unvegetated, shallow dirt feature that conveys ephemeral stormwater runoff from Callison Road. Water within the ditch drains a short distance to the southwest into a culvert. This ditch would be impacted by the proposed improvements to Callison Road that would be conducted as part of the

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		project. While the roadside ditch was created in uplands to drain upland runoff, receives ephemeral flows, and is not a relocated tributary, absent confirmation from the U.S. Army Corps of Engineers (USACE) that the roadside drainage ditch does not require Section 404 coverage, a significant impact could occur due to road improvement activities. As such, the Mitigation Measures 7-3(c) though 7-3(f) would ensure impacts to the roadside ditch do not occur.
Policy 7	Require field studies by qualified professionals as part of the environmental review process for projects where the habitat of special status species is known to exist in order to document the possible occurrence of special status plant species and provide a method of protecting, monitoring, replacing or otherwise mitigating the impacts of development in and around these sensitive habitats.	As discussed in Chapter 7, Biological Resources, of the EIR, a site-specific Biological Resources Assessment (BRA), which included the completion of protocol-level surveys, was prepared for the proposed project by Madrone Ecological Consulting to document the possible occurrence of special-status plant species within the project site. Based on the BRA impacts to special-status plant species would not occur as a result of the proposed project.
Fish and Wildlife		
Policy 9	Require field studies by qualified professionals as part of the environmental review process for projects where the habitat of a special-status species has been identified. These studies shall document the possible occurrence of special-status wildlife species and provide a method for their protection, monitoring, replacement, or for otherwise mitigating development near their sensitive habitats.	As discussed in Chapter 7, Biological Resources, of the EIR, a site-specific BRA was prepared for the proposed project by Madrone Ecological Consulting to document the possible occurrence of special-status wildlife species within the project site. Based on the BRA, impacts to nesting birds and raptors could occur as a result of the proposed project. As such, Mitigation Measure 7-2 would require a preconstruction nesting bird survey to ensure the identification and protection of nesting birds and raptors during project construction.
Air Quality		
Policy 2	Development projects shall be located and designed to conserve air quality and minimize direct and indirect emission of air contaminants. Development proposals shall be submitted to the Placer County Air Pollution Control District to identify the project's air quality impacts prior to consideration by the appropriate decision-making body. Appropriate mitigation measures, including any issuance of an air quality permit to direct emission sources, shall be included in the project proposal.	See response to Policy 6.F.6, above.
Cultural and Paleontological Resources		
Policy c	Require site-specific studies as part of the environmental review process, for paleontological, prehistoric, historical and natural	As discussed in Chapter 8, Cultural Resources, as well as Chapter 17, Tribal Cultural Resources, of this EIR, a Cultural Resources Study was

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elements in all instances where land development or property demolition has the potential to have a detrimental impact on a possibly significant cultural resource or historic structure (i.e. buildings aged 45 years or older). Whenever possible, projects should be planned to avoid adverse impacts to cultural resources. Avoidance strategies are preferred over mitigation of the impacts.	prepared by LSA Associates, Inc. A Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC), and direct input from the United Auburn Indian Community (UAIC) were included in the project analysis to ensure impacts to known cultural or tribal cultural resources do not occur. In addition, both Chapter 8 and Chapter 17 include mitigation measures to ensure impacts to unknown cultural or tribal cultural resources that have the potential to be discovered during ground disturbing activities do not occur as a result of the proposed project.

14. Noise

14. NOISE

14.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The methods by which the potential impacts are analyzed are discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Environmental Noise & Vibration Assessment (Noise Assessment) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Appendix O of this EIR).[1] Other sources of information used in this chapter include the Placer County General Plan,[2] the Placer County General Plan EIR,[3] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[4]

14.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Fundamentals of Acoustics

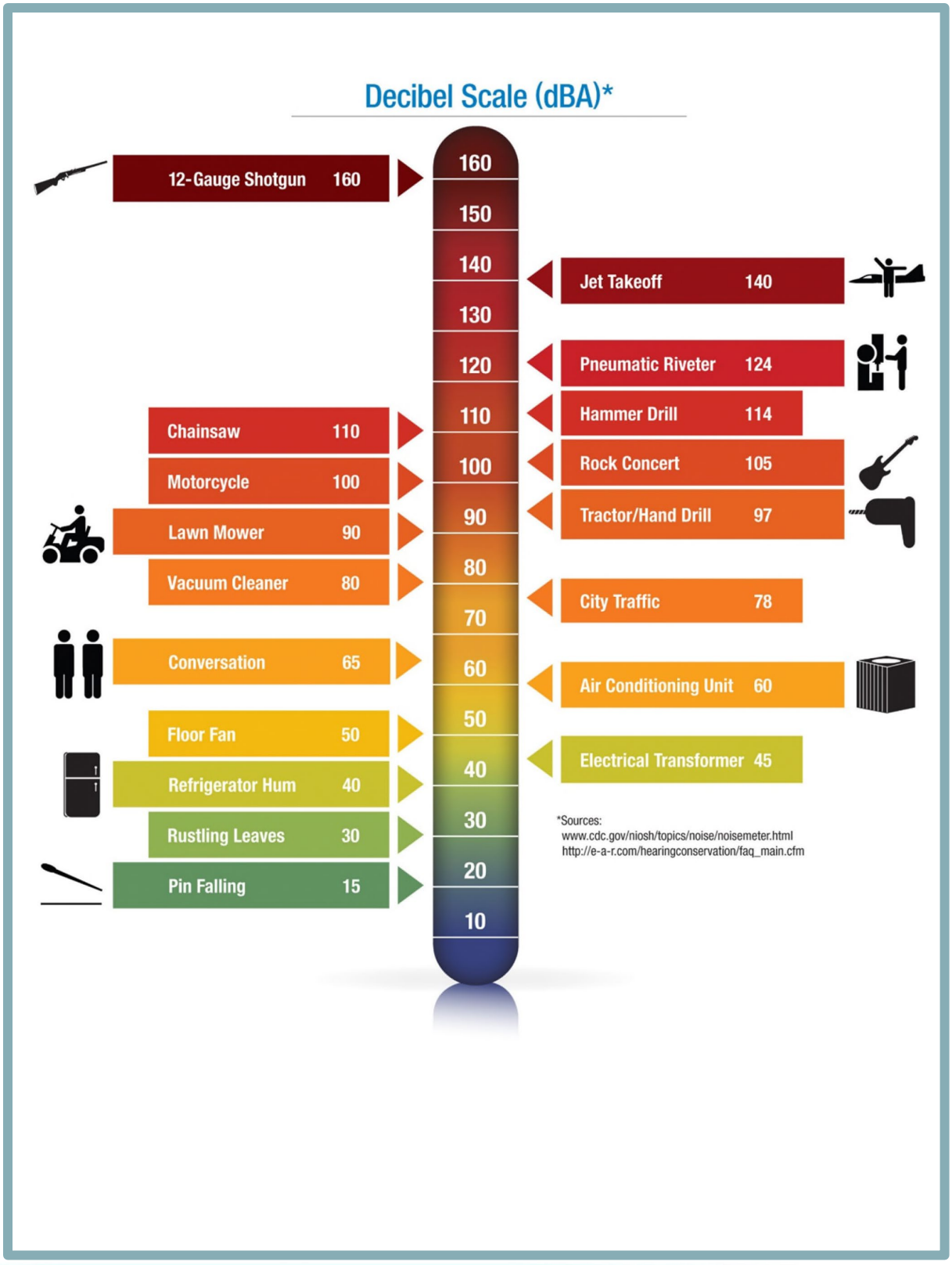
Decibels (dB) are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the typical range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and the use of A-weighted sound level, expressed as dBA, has become the standard tool of environmental noise assessment. Noise levels associated with common noise sources are provided in Figure 14-1.

Several time-averaged scales represent noise environments and consequences of human activities. Community Noise Equivalent Level (CNEL), which can be used to compare the noise level of neighborhoods, is the weighted average noise level over time, presented in dB. Community noise is also commonly described in terms of the ambient noise level, which is defined as the overall noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor (L_{dn} or DNL), and represents a correlation with community response to noise.

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1 Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment: Project 8 Winery, Placer County, California*. July 13, 2022.
2 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

Figure 14-1
Noise Levels Associated with Common Noise Sources



The L_{dn} is based on the average noise level over a 24-hour period, with an additional 10 dB weight applied to noise that occurs during nighttime hours (10:00 PM to 7:00 AM). The 10 dB nighttime penalty is applied to account for the assumption that people are more sensitive to nighttime noise exposures as compared to daytime noise exposures. The highest root-mean-square (RMS) sound level measured over a given period of time is expressed as L_{max}.

Stationary sources of noise, including construction equipment, attenuate at a rate of 6.0 to 7.5 dB per doubling of distance from the source depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling of distance, as such sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and, therefore, have less attenuation (6.0 dB per doubling of distance). Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, increase the efficacy of noise attenuation that occurs by distance alone.

Finally, Sound Exposure Level (SEL) is the constant sound level that has the same amount of energy in one second as the original noise event and allows sound exposures of different durations to be related to one another in terms of total acoustic energy.

Existing Sensitive Receptors

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise, because intrusive noise can be disruptive to such activities. Sensitivity to ambient noise levels is also related to the amount of noise exposure (in terms of both exposure time and shielding from noise sources). Noise sensitive land uses typically include residences, schools, child care centers, hospitals, long-term health care facilities, convalescent centers, retirement homes, and recreation areas.

The existing noise-sensitive land uses in the project vicinity consist of rural residences located on all sides of the project site, identified as R-1 through R-11 on Figure 14-2.

Existing Ambient Noise Environment

The existing ambient noise environment at the project site is defined primarily by noise from distant roadway traffic and by intermittent railroad operations on adjacent Union Pacific Railroad (UPRR) tracks to the north and south of the project site.

To quantify existing ambient noise levels within the project area, BAC conducted long-term (96-hour) ambient noise level measurements at four locations from March 31 to April 3, 2022. The equipment and approach used to evaluate existing noise levels are discussed in the Method of Analysis section of this chapter. The long-term noise survey locations are shown on Figure 14-3. Sites 1 and 3 were specifically selected to be representative of the ambient noise level environments at the nearest existing residential uses to the north and south of the project site, respectively, located near adjacent UPRR tracks. Sites 2 and 4 were chosen to be representative of the ambient noise level environments at the nearest existing residential uses to the west and east of the project site, respectively, which have further setbacks from the UPRR tracks.

The results of the long-term ambient noise survey are summarized in Table 14-1. As shown in the table, DNL, L_{eq}, and L_{max} noise levels were highest at Site 1, likely due to train passbys along the adjacent UPRR tracks to the north.

Figure 14-2
Project Site and Nearby Sensitive Receptors

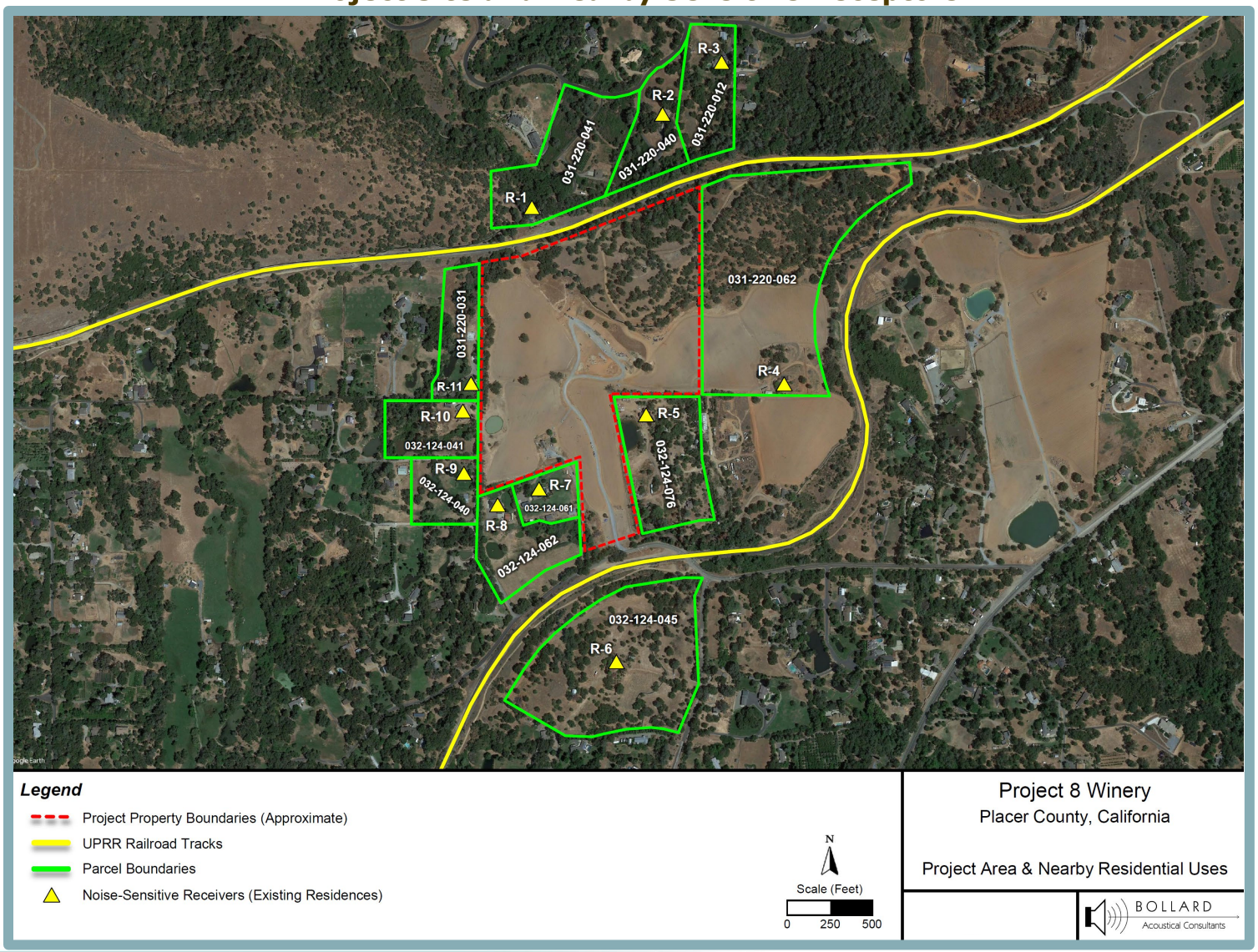


Figure 14-3
Long-Term Noise Survey Sites

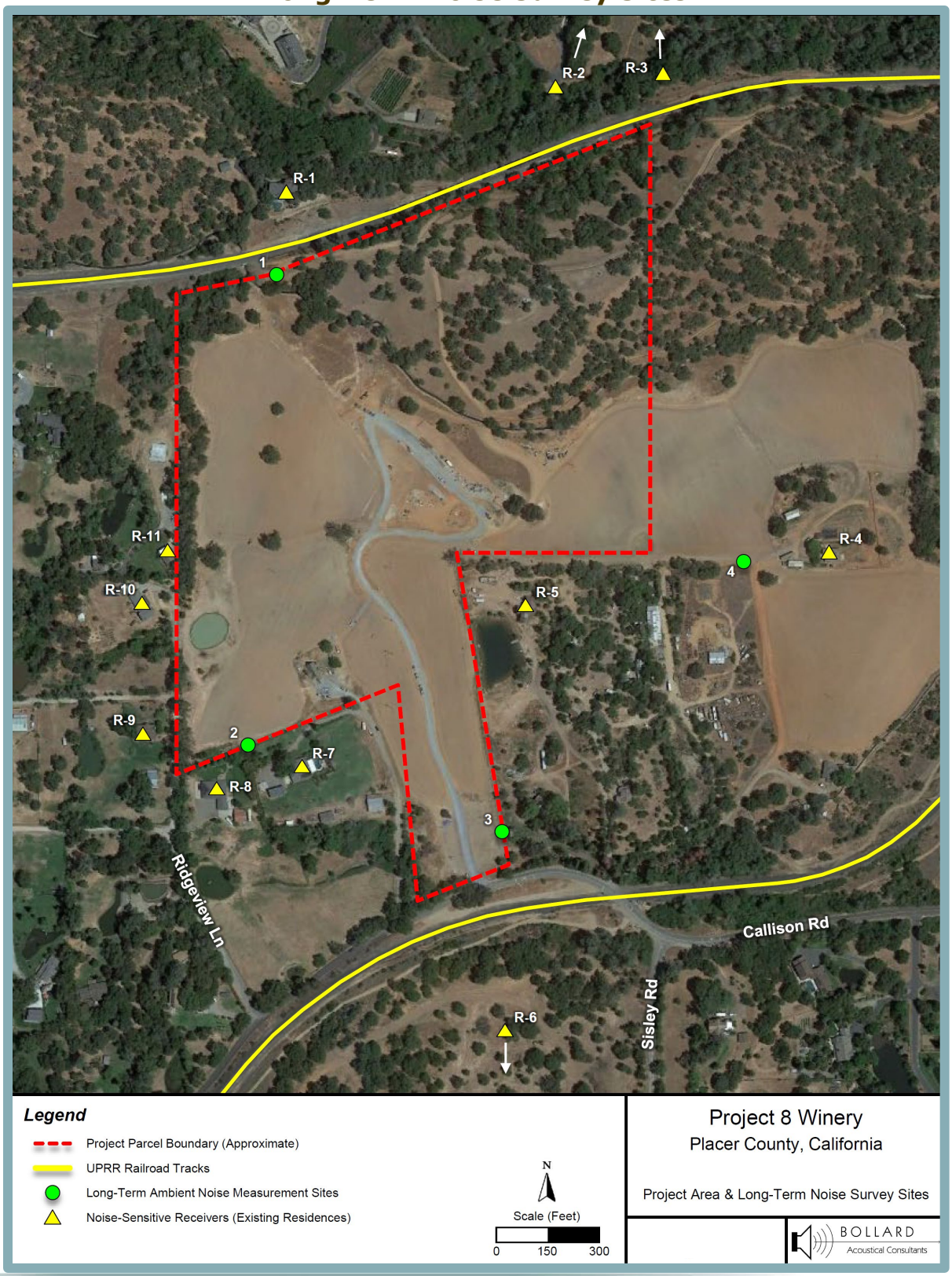


Table 14-1
Long-Term Ambient Noise Survey Results[1]

Survey Location[2]	Date	DNL	Average Measured Hourly Noise Levels (dBA)[3]			
			Daytime		Nighttime	
			L_{eq}	L_{max}	L_{eq}	L_{max}
Site 1: North end of project site near UPRR tracks	3/31/22	70	67	82	63	65
	4/1/22	76	68	81	69	70
	4/2/22	71	66	75	65	62
	4/3/22	71	62	70	65	81
Site 2: Southwest end of project site adjacent to residential uses	3/31/22	57	58	76	45	56
	4/1/22	58	58	76	48	62
	4/2/22	54	54	72	44	58
	4/3/22	59	56	71	52	68
Site 3: South end of project site adjacent to residential uses	3/31/22	52	49	67	45	58
	4/1/22	55	52	68	48	59
	4/2/22	53	53	68	44	56
	4/3/22	55	50	71	48	67
Site 4: East of project site adjacent to residential uses	3/31/22	61	63	75	43	58
	4/1/22	62	62	77	53	64
	4/2/22	62	64	75	42	57
	4/3/22	69	65	76	61	73

1 Detailed summaries of the noise monitoring results are provided in Appendices D and E of the Noise Assessment.
2 Long-term ambient noise monitoring locations are identified in Figure 14-3.
3 Daytime hours: 7:00 AM to 10:00 PM | Nighttime hours: 10:00 PM to 7:00 AM.

Source: Bollard Acoustical Consultants, Inc., 2022.

It should be noted that upon analysis of the measurement data for Site 4, BAC determined that noise levels measured on April 3, 2022 were anomalously high, relative to levels measured at the same location over previous days. Although the source(s) affecting the measurements at Site 4 during that 24-hour period are not specifically known, the possibilities include motorized landscape equipment or other activities at nearby residential uses. Nonetheless, the ambient noise levels measured at Site 4 on April 3, 2022 are considered unreliable and are not representative of the typical ambient noise level environment within the vicinity of the measurement location. For more details on the survey results, see Appendices D and E of the Noise Assessment.

Existing Traffic Noise Levels

The Federal Highway Administration (FHWA) Traffic Noise Model (FHWA-RD-77-108) was used to develop existing noise contours, expressed in DNL, for major roadways within the project vicinity. The approach used to evaluate existing traffic noise levels is discussed in the Method of Analysis section of this chapter. Traffic data in the form of weekday PM (4:00 PM to 6:00 PM) and Saturday noon peak hour (12:00 PM to 1:00 PM) turning movements for Existing conditions were obtained from the project traffic consultant, KD Anderson & Associates, Inc. Average daily traffic (ADT) volumes were conservatively estimated by applying a factor of 10 to peak hour conditions.

The traffic noise level at 100 feet from the roadway centerlines and distances from the centerlines of the 60 dB DNL, 65 dB DNL, and 70 dB DNL contours are summarized in Table 14-2 and Table 14-3. The actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding by way of local

topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. In addition, existing sensitive land uses within the project vicinity are located at varying distances from the centerlines of the local roadway network. A 100-foot reference distance is used to provide a reference position at which changes in existing and future traffic noise levels resulting from the proposed project can be evaluated.

Table 14-2
Existing Traffic Noise Modeling Results – Weekday PM Peak Hour

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (Feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	60	21	46	99
2		South	59	19	42	90
3		East	58	16	34	74
4		West	62	27	59	128
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	54	9	19	40
6		South	48	3	8	16
7		East	59	18	39	84
8		West	59	19	42	90
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	53	8	17	36
10		South	57	14	30	65
11		East	60	22	46	100
12		West	55	9	20	44
13	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	North	60	22	47	100
14		South	56	11	24	51
15		East	63	32	70	150
16		West	59	18	39	85
17	(5) Old State Highway/Taylor Road	North	38	1	2	4
18		South	58	15	32	69
19		East	61	25	54	117
20		West	56	12	26	55
21	(6) Taylor Road/Callison Road	North	60	21	46	100
22		South	60	21	46	99
23		East	--	--	--	--
24		West	49	4	9	19
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	41	1	2	5
27		East	48	4	8	17
28		West	49	4	8	18
29	(8) Project Driveway/Callison Road	North	--	--	--	--
30		South	--	--	--	--
31		East	49	4	8	18
32		West	49	4	8	18
33	(9) Taylor Road/English Colony/Rock Springs Road	North	60	23	49	106
34		South	61	26	56	120
35		East	53	7	15	33
36		West	57	13	27	59

(Continues on next page)

Table 14-2
Existing Traffic Noise Modeling Results – Weekday PM Peak Hour

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (Feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
37	(10) Taylor Road/Penryn Road	North	61	27	58	125
38		South	60	20	44	95
39		East	59	19	40	86
40		West	34	0	1	2
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	60	20	44	94
42		South	61	25	53	114
43		East	59	18	38	82
44		West	58	16	35	75
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	61	24	53	114
46		South	60	22	48	104
47		East	45	2	5	10
48		West	59	18	40	86

Note: Blank cell occurs where traffic data was not provided.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-3
Existing Traffic Noise Modeling Results – Saturday Noon Peak Hour

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (Feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	58	16	36	77
2		South	58	16	34	73
3		East	57	15	32	68
4		West	61	23	51	109
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	52	7	14	30
6		South	47	3	7	14
7		East	58	16	33	72
8		West	58	16	34	73
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	53	7	16	35
10		South	58	16	34	74
11		East	59	20	42	91
12		West	53	8	17	37
13	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	North	60	20	43	93
14		South	56	11	23	50
15		East	62	30	64	139
16		West	58	16	34	74
17	(5) Old State Highway/Taylor Road	North	34	0	1	2
18		South	56	12	26	57
19		East	60	20	43	93
20		West	55	10	22	47

(Continues on next page)

Table 14-3
Existing Traffic Noise Modeling Results – Saturday Noon Peak Hour

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (Feet)		
				70 dB DNL	65 dB DNL	60 dB DNL
21	(6) Taylor Road/Callison Road	North	58	17	37	79
22		South	58	17	36	78
23		East	--	--	--	--
24		West	48	3	7	16
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	39	1	2	4
27		East	47	3	7	14
28		West	47	3	6	13
29	(8) Project Driveway/Callison Road	North	--	--	--	--
30		South	--	--	--	--
31		East	47	3	6	13
32		West	47	3	6	13
33	(9) Taylor Road/English Colony/Rock Springs Road	North	59	18	40	85
34		South	60	23	50	107
35		East	52	7	14	31
36		West	56	12	25	55
37	(10) Taylor Road/Penryn Road	North	61	24	51	110
38		South	58	17	36	78
39		East	59	18	39	83
40		West	31	0	1	1
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	60	21	45	98
42		South	61	24	51	109
43		East	59	18	38	82
44		West	58	15	32	69
45	(12) Penryn Road/I-80 EB Ramps/Boulder Creek	North	61	24	51	110
46		South	60	20	44	94
47		East	45	2	5	11
48		West	58	17	36	77

Note: Blank cell occurs where traffic data was not provided.

Source: Bollard Acoustical Consultants, Inc., 2022.

Fundamentals of Vibration

Vibration is similar to noise in that both involve a source, a transmission path, and a receiver. However, while noise is generally considered to be pressure waves transmitted through air, vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration depends on their individual sensitivity, as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second (in/sec) peak particle velocity (PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception, as well as damage to structures, have been developed for vibration in terms of PPV and RMS velocities. As vibrations

travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes decrease with increasing distance.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases. According to the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual, operation of construction equipment and construction techniques generate ground vibration. Roadway traffic can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. However, traffic rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.

Existing Ambient Vibration Environment

During a site visit on March 29, 2022, BAC staff noted that vibration levels were below the threshold of perception at all locations surrounding the project site and in the immediate project vicinity. Therefore, the existing vibration environment in the immediate project vicinity is considered negligible. It should be noted that during the passage of trains along the nearby UPRR tracks, vibration levels within 100 feet of the tracks would be expected to be perceptible; otherwise, ambient vibration conditions are considered negligible.

14.3 REGULATORY CONTEXT

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. Applicable federal laws or regulations pertaining to noise or vibration that would directly apply to the proposed project do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

State Regulations

The following are the State environmental laws and policies relevant to noise and vibration.

California Building Code

The California Building Code (Title 24, Part 2 of the California Code of Regulations [CCR]) establishes uniform minimum noise insulation performance standards to protect persons within new buildings that house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also requires that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise and vibration.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to noise and vibration are applicable to the proposed project.

Goal 9.A To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Policy 9.A.1 The County shall not allow development of new noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 (see Table 14-4) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1 (see Table 14-4).

Policy 9.A.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 (see Table 14-4) as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

Policy 9.A.5 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 9-1 (see Table 14-4) at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 9.A.6 The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3 (see Table 14-5).

Policy 9.A.8 New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3 (see Table 14-5), unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3 (see Table 14-5).

Table 14-4
Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources[1]

Zone District of Receptor	Property Line of Receiving Use (L_{dn}, dB)	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	---	45
Industrial Park	75	45
Industrial Reserve	---	---
Airport	---	45
Unclassified	---	---
Farm	---[6]	---
Agriculture Exclusive	---[6]	---
Forestry	---	---
Timberland Preserve	---	---
Recreation & Forestry	70	---
Open Space	---	---
Mineral Reserve	---	---

Notes:

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable L_{dn} shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, or if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 9-1 and Table 9-3 (see Table 14-4 and see Table 14-5). Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 9-1 and 9-3 (see Table 14-4 and see Table 14-5), said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art[5] at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision-making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.
- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

[1] Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County, and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if

(Continues on next page)

Table 14-4
Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources[1]

forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels.

2 Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

3 Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses.

For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

4 Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards.

Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

5 State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

6 Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an L_{dn} of 70 dBA will be considered acceptable outdoor exposure at a residence.

Source: Placer County General Plan, 2013.

Table 14-5
Maximum Allowable Noise Exposure for Transportation Noise Sources

Noise Sensitive Land Uses	Outdoor Activity Area[1]	Interior Spaces	
	L_{dn}, dB	L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2 As determined for a typical worst-case hour during periods of use.
3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Placer County General Plan, 2013.

Policy 9.A.9 Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 (see Table 14-5) or the performance standards in Table 9-3 (see Table 14-5) at outdoor activity areas or interior spaces of existing noise sensitive land uses.

Policy 9.A.11 The County shall require one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;
b. Lowering speed limits, if feasible and practical;
c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;
d. Acoustical treatment of buildings; or,
e. Construction of noise barriers.

Policy 9.A.12 Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3 (see Table 14-4 and Table 14-

5), the emphasis of such measure shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Community Development Element related to noise are applicable to the proposed project.

Community Noise

Goal a — Protect area residents from the harmful and annoying effects of exposure to excessive noise.

Goal b — Preserve the rural noise environment of the plan area and surrounding areas.

Goal c — Protect the economic base of the plan area by preventing incompatible land uses from encroaching upon existing or planned noise producing uses.

Goal d — Encourage the application of state of the art land use planning methodologies in areas of potential noise conflicts.

Policy a — New development of noise-sensitive uses shall not be allowed where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 8 (see Table 14-4) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 8 (see Table 14-4).

Policy b — Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 8 (see Table 14-4) as measured immediately within the property line of lands designated for noise-sensitive uses.

Policy c — Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 8 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. The requirements for the content of an acoustical analysis are given by Table 10 (see Table 14-6).

Policy d — The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9 (see Table 14-5).

Table 14-6
Requirements for an Acoustical Analysis

An acoustical analysis prepared pursuant to the Noise Element shall:
A. Be the financial responsibility of the applicant.
B. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
C. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
D. Estimate existing and projected cumulative (20 years) noise levels in terms of L_{dn} of CNEL and/or the standards of Table 8 (see Table 14-4), and compare those levels to the adopted policies of the Countywide Noise Element. Noise prediction methodology must be consistent with the Placer County Acoustical Design Manual. Traffic assumptions must be consistent with Volume II of the Countywide General Plan Background Report, unless more current data are available.
E. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
F. Estimate noise exposure after the prescribed mitigation measures have been implemented.
G. Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

Source: Horseshoe Bar/Penryn Community Plan, 2005.

Policy f	Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9 (see Table 14-5) at outdoor activity areas or interior spaces of existing noise-sensitive land uses in either the incorporated or unincorporated areas.
Policy i	Require that wherever noise mitigation measures are identified as necessary to insure an acceptable noise environment, that these measures are implemented as a part of project approval.
Policy j	Earthen berms planted with native or native-appearing vegetation should be used in place of masonry sound walls.

Placer County Code

The applicable regulations from the Placer County Code presented below.

Placer County Noise Ordinance

Section 9.36.060 of the Placer County Code establishes non-transportation noise level standards for noise-sensitive receptors. The purpose of the Noise Ordinance is to implement the noise level

standards identified in the Placer County General Plan. The specific language of Section 9.36.060 is provided below:

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:

1. Causes the exterior sound levels when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five (5) dBA or

2. Exceeds the sound level standards as set forth in Table 1 (see Table 14-7), whichever is the greater.

Table 14-7
Noise Level Standards for Non-Transportation Noise Sources

Sound Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq}, dB	55	45
L_{max}, dB	70	65

Source*: *Placer County Noise Ordinance.

B. Each of the sound level standards specified in Table 1 (see Table 14-7) shall be reduced by five (5) dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five (5) dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1 (see Table 14-7).

Pursuant to Section 9.36.030 of the Placer County Code (Exemptions), sound or noise emanating from construction activities between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday, is exempt from Section 9.36.060 of the Placer County Code Noise Ordinance, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order. However, the hours of construction were modified in the Planning Commission revisions to the Placer County Board of Supervisors Minute Order 90-08 and, thus, the following standards are applicable to the proposed project:

Construction noise emanating from any construction activities for which a Grading or Building Permit is required is prohibited on Sundays and Federal Holidays, and shall only occur: a) Monday through Friday, 6:00 a.m. to 8:00 p.m. (during daylight savings) b) Monday through Friday, 7:00 a.m. to 8:00 p.m. (during standard time) c) Saturdays, 8:00 a.m. to 6:00 p.m.

In addition, temporary signs shall be located throughout the project, as determined by the Development Review Committee, at key intersections depicting the above construction hour limitations.

Specific Use Requirements – Wineries and Farm Breweries

Pursuant to Placer County Code Section 17.56.300(E), the following development and operational standards apply to all wineries and farm breweries, and expansions of existing lawfully operating facilities. If a winery or farm brewery is required to have a use permit by Section 17.56.300, the standards are applied in accordance with the conditions placed on the use permit entitlement. The standards are applied with flexibility to encourage activities for the protection and preservation of agriculture.

4. Noise Regulations.

    a. All winery and farm brewery facilities shall be subject to Placer County Code Article 9.36 (Noise), unless a more restrictive standard is specified in a community plan.

    b. Prior to hosting events with amplified speech or music and weddings the owner/operator shall submit a site plan to the community development resource agency. The site plan shall identify the proposed outdoor location of the event and the distance to the nearest residential receptor property line. If the distance between the proposed sound source and nearest sensitive receptor property line is greater than shown in Table 5 below (see Table 14-8), then additional acoustical analysis shall not be required. If the distance between the proposed sound source location and nearest sensitive receptor property line is less than shown in the Table 5 below, a site-specific noise analysis shall be required to evaluate compliance with the Placer County Code Article 9.36 (Noise).

Table 14-8
Distances Required to Attenuate Noise[1]

Event/Activity	Setback Required (Feet)	
	Auburn/Bowman Community Plan	Other Community Plan Areas
Amplified Music/Speech at Event on 20+ Acres	1,225	750
Amplified Music/Speech at Event on 10 to Less Than 20	925	550
Amplified Speech	450	275

[1] Parcels within 0.50 acre of a size referenced in this table that do not result in either a new significant environmental impact or a substantial increase in the severity of an impact if categorized as a larger size shall be subject to a planning director determination of the appropriate parcel size designation based upon: (a) the actual size of the parcel, (b) the zoning designation for the property, and/or (c) applicable land conveyance documents.

Source*: *Placer County Code Section 17.56.300(E), Table 5.

14.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to noise and vibration. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels (see Chapter 19, Effects Not Found to be Significant).

As noted above, issues related to whether the proposed project would result in the following are discussed in Chapter 19, Effects Not Found to be Significant, of this EIR:

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Summary of Applicable Noise Standards

Applicable noise level standards from the Placer County General Plan and the Placer County Code are summarized below.

Transportation Noise

The Placer County General Plan Noise Element applies 60 dB L_{dn}/CNEL exterior and 45 dB L_{dn}/CNEL interior noise level standards for residential uses affected by transportation noise sources. The County may conditionally allow exterior noise levels between 60 and 65 dB L_{dn} for residential uses, provided that practical noise reduction measures have been implemented and interior noise levels remain in compliance with the 45 dB L_{dn} interior standard.

Non-Transportation Noise

The nearest off-site noise-sensitive land uses that could potentially be affected by the proposed project consist of rural residences located on all sides of the project site. The Placer County General Plan establishes exterior and interior noise level standards of 60 and 45 dB DNL, respectively, for residential uses affected by non-transportation noise sources, such as those proposed by on-site project operations (see Table 14-4). However, pursuant to Table 9-1 of the Placer County General Plan (see Table 14-4), where existing transportation noise levels exceed the non-transportation standards established therein, the allowable DNL is raised to the same level as that of the ambient level.

Placer County Code Section 9.36.060(2) establishes sound level limits for sensitive receptors exposed to non-transportation noise sources, such as those proposed by on-site project operations. Specifically, the County Code establishes hourly average and maximum noise level standards of 55 dB L_{eq} and 70 dB L_{max}, respectively, during daytime hours (7:00 AM to 10:00 PM). The County Code also establishes hourly average and maximum noise level standards of 45 dB

L_{eq} and 65 dB L_{max}, respectively, during nighttime hours (10:00 PM to 7:00 AM). However, County Code Section 9.36.060(A) states that non-transportation noise sources shall not exceed the measured ambient noise level at the sensitive receptor by 5.0 dB or exceed the noise level standards in Table 14-7, whichever is greater.

As discussed previously, BAC conducted a long-term (96-hour) ambient noise level survey at four locations from March 31st to April 3rd, 2022 (see Table 14-1). Based on a comparison of ambient noise level data contained therein and the Placer County General Plan and County Code non-transportation noise standards, the County's criteria are being exceeded at the measurement sites, which are representative of the ambient noise level environment at the nearest residential uses. Based on the results from the ambient noise level survey and pursuant to the General Plan and County Code adjustment criteria discussed above, the following exterior noise level standards shown in Table 14-9 through Table 14-11 are applied to project on-site noise sources and assessed at the nearest residential receivers.

Table 14-9
Placer County General Plan Exterior Noise Level Standards Applied to the Proposed Project

Residential Receiver	Representative Measurement Site	Measured Noise Level, DNL (dB)[1]	Unadjusted Noise Standard, DNL (dB)[2]	Adjusted for Ambient?	Applied Noise Standard, DNL (dB)[3]
R-1, R-2, R-3	1	70	50	Yes	70
R-4, R-5	4	61		Yes	61
R-6, R-7	3	52		Yes	52
R-8, R-9, R-10, R-11	2	54		Yes	54

1 Lowest measured DNL at measurement sites during BAC noise survey.
2 Unadjusted General Plan noise level standard applicable to residential uses.
3 Applied noise standards based on BAC ambient noise survey and General Plan ambient noise adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-10
Placer County Code Daytime Exterior Noise Level Standards Applied to the Proposed Project

Residential Receiver	Representative Measurement Site	Measured Noise Levels (dB)[1]		Unadjusted Noise Standards (dB)[2]		Adjusted for Ambient?		Applied Noise Standards (dB)[3]	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-1, R-2, R-3	1	62	70	55	70	Yes	Yes	67	75
R-4, R-5	4	62	75			Yes	Yes	67	80
R-6, R-7	3	49	67			No	Yes	55	72
R-8, R-9, R-10, R-11	2	54	71			Yes	Yes	59	76

1 Lowest average measured hourly daytime noise levels at measurement sites during BAC noise survey.
2 Unadjusted County Code daytime noise level standards applicable to sensitive receptors (residential).
3 Applied daytime noise standards based on BAC ambient noise survey and County Code ambient noise adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-11
Placer County Code Nighttime Exterior Noise Level Standards Applied to the Proposed Project

Residential Receiver	Representative Measurement Site	Measured Noise Levels (dB)[1]		Unadjusted Noise Standards (dB)[2]		Adjustment for Ambient?		Applied Noise Standards (dB)[3]	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-1, R-2, R-3	1	63	62	45	65	Yes	Yes	68	67
R-4, R-5	4	42	57			Yes	No	47	65
R-6, R-7	3	44	56			Yes	No	49	65
R-8, R-9, R-10, R-11	2	44	56			Yes	No	49	65

1 Lowest average measured hourly nighttime noise levels at measurement sites during BAC noise survey.
2 Unadjusted County Code nighttime noise level standards applicable to sensitive receptors (residential).
3 Applied nighttime noise standards based on BAC ambient noise survey and County Code ambient noise adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if it substantially increases the ambient noise levels for adjoining areas or exposes people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in transportation noise associated with the proposed project is a factor in determining significance.

Placer County, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient noise due to traffic. A common practice in many jurisdictions is to use a 3.0 to 5.0 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions.

The following table was developed by the Federal Interagency Committee on Noise (FICON) as a means of developing thresholds for identifying project-related noise level increases. The rationale for the graduated scales is that test subjects' reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB L_{dn}, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated.

Therefore, because the County does not have defined thresholds for what would be considered a substantial increase in traffic noise levels, information from Table 14-12 is used.

Table 14-12
Significance of Changes in Cumulative Noise Exposure (dB DNL)

Ambient Noise Level Without Project	Increase Required for Significant Impact
<60	+5.0 or more
60 to 65	+3.0 or more
>65	+1.5 or more

Source: Federal Interagency Committee on Noise, 2000.

The approach to assessing the significance of increases in off-site traffic noise is also consistent with other recent Placer County EIRs and the industry-standard approach in general. The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, Caltrans requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5.0 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a conservative approach to impact assessment for the proposed project.

Vibration

Placer County does not have specific policies or standards pertaining to vibration levels. However, vibration levels associated with construction activities and project operations are addressed as potential vibration impacts associated with project implementation. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Construction operations have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Table 14-13 and Table 14-14 present the Caltrans guidance criteria for building structure vibration and vibration annoyance potential, respectively.

Table 14-13
Caltrans Guidance Criteria for Building Structure Vibration

Structure and Condition	Limiting PPV (in/sec)
Historic and Some Old Buildings	0.5
Residential Structures	0.5
New Residential Structures	1.0
Industrial Buildings	2.0
Bridges	2.0

Source: Caltrans Transportation and Construction Vibration Guidance Manual, Table 14, 2020.

Table 14-14
Caltrans Guidance Criteria for Vibration Annoyance Potential

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Severe/Very Disturbing	2.0	0.4 to 3.6
Strongly Perceptible	0.9	0.1
Distinctly Perceptible	0.24	0.035
Barely/Slightly Perceptible	0.035	0.012

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers and vibratory compaction equipment.

Source: Caltrans Transportation and Construction Vibration Guidance Manual, Tables 4 & 6, 2020.

A significant impact would be identified if project construction activities or proposed on-site operations would expose sensitive receptors to excessive groundborne vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to such sources

would exceed the Caltrans vibration impact criteria of 0.5 PPV in/sec for damage to residential structures and 0.24 PPV in/sec for annoyance potential.

Method of Analysis

Below are descriptions of the methodologies used in the Noise Assessment (see Appendix O of this EIR) to measure background and ambient noise and estimate future traffic noise, construction noise and vibration associated with the project, parking lot operational noise levels, and outdoor amplified music levels during project operation. Further modeling details and calculations are provided in Appendix O of this EIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

On-Site Existing Ambient Noise Levels

To quantify existing ambient noise levels within the project site, BAC conducted long-term (96-hour) ambient noise level measurements at four locations (see Figure 14-3) from March 31 to April 3, 2022. Larson Davis Laboratories (LDL) Model LxT 820 and 831 precision integrating sound level meters were used to complete the long-term noise level survey. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4). The results of the long-term ambient noise survey are shown numerically and graphically in Appendices D and E of the Noise Assessment, respectively, and are summarized in Table 14-1 above.

Project Traffic Noise Level Increases

The FHWA-RD-77-108 traffic noise model was used to develop existing noise contours, expressed in DNL, for major roadways within the project vicinity. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

Traffic data in the form of Weekday PM (4:00 PM to 6:00 PM) and Saturday Noon (12:00 PM to 1:00 PM) peak hour turning movements for Existing conditions were obtained from the project traffic consultant, KD Anderson & Associates, Inc. ADT volumes were conservatively estimated by applying a factor of 10 to peak hour conditions. Existing traffic noise levels were calculated using the aforementioned data and the FHWA Model. The Existing traffic noise level at 100 feet from the roadway centerline and distances from the centerlines of selected roadways to the 60 dB DNL, 65 dB DNL, and 70 dB DNL contours are summarized in Table 14-2 and Table 14-3. The FHWA Model was used with traffic input data to predict project traffic noise level increases relative to Existing and Cumulative conditions. A complete listing of the FWHA Model inputs are provided in Appendix B of the Noise Assessment.

In many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding by way of local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. In addition, existing sensitive land uses within the project vicinity are located at varying distances from the centerlines of the local roadway network. The 100-foot reference distance is used in the Noise Assessment to provide a reference position at which changes in existing and future traffic noise levels resulting from the proposed project can be evaluated.

Project Construction Noise and Vibration Levels

Construction noise and vibration was analyzed using data compiled for various pieces of construction equipment at representative distances of 50 and 25 feet, respectively. Construction noise is discussed relative to the applicable Placer County noise policies and standards.

Project Operation Parking Lot Noise Levels

To determine potential noise exposure from project parking lot activities, BAC used specific parking lot noise level measurements previously conducted by BAC. Specifically, a series of individual noise measurements were conducted of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and people conversing as they entered and exited the vehicles. The results of those measurements revealed that individual parking lot movements generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet. The maximum noise level associated with parking lot activity typically did not exceed 65 dB L_{max} at the same reference distance.

With respect to L_{eq} noise levels, based on the proposed site plan, approximately 91 parking space stalls would be constructed on-site (72 spaces near the octagon building and 19 spaces near the warehouse building). BAC conservatively assumed the parking areas could accommodate up to 75 and 25 spaces, respectively. BAC additionally conservatively assumed that all stalls within the nearest parking areas to residential uses could fill or empty during a given peak hour (worst-case scenario). The hourly average noise level generated by parking lot movements was computed using the following formula:

$$Peak\ Hour\ L_{eq} = 70+10*log\ (N) - 35.6$$

Where 70 is the mean SEL for an automobile parking lot arrival or departure, N is the number of parking lot operations in a given hour, and 35.6 is 10 times the logarithm of the number of seconds in an hour. To calculate project parking activity noise generation relative to the Placer County General Plan DNL noise level criteria, BAC conservatively assumed that worst-case peak-hour parking activity could occur during every hour of an on-site Agricultural Promotional Event (i.e., 7:00 AM to 10:00 PM). The project does not propose operations during nighttime hours (i.e., 10:00 PM to 7:00 AM).

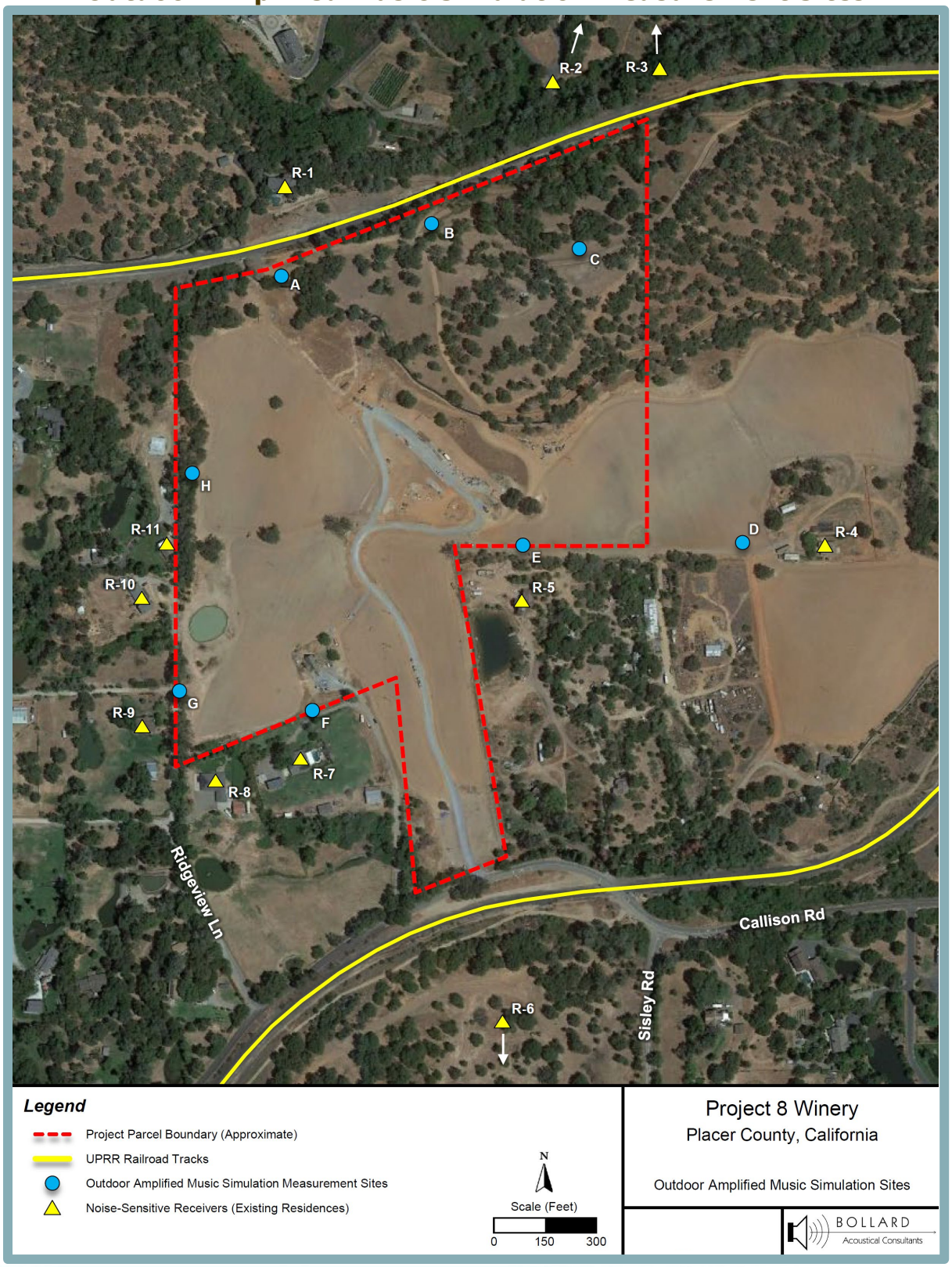
Using the information above, the provided site plans (for scaling distances), and assuming standard spherical spreading loss (-6.0 dB per doubling of distance), worst-case project parking activity noise exposure at the property lines of the nearest existing residential uses (receivers R-1 through R-11) were calculated.

Project Operation Outdoor Amplified Music

BAC quantified the noise levels that would be generated from project-associated amplified music/speech through conducting short-term noise level measurements on Tuesday, March 29, 2022 during a simulated event with amplified music. Sound level meters were calibrated before use and placed on a tripod five feet aboveground at eight locations, identified as Sites A through H on Figure 14-4.

The noise measurement locations were intended to quantify event music noise exposure at the nearest existing residential uses (receivers R-1 through R-11). The sound system was set up at elevated positions to produce sound levels typical or slightly above what would be produced by amplified music playing during project operation.

Figure 14-4
Outdoor Amplified Music Simulation Measurement Sites



The outdoor amplified music simulation used reference music levels of 70 dB L_{eq} (average) and 75 dB L_{max} (maximum) at 50 feet from the speakers. While music was being played, short-term noise level measurements were conducted at the reference positions in front of the speakers, as well as at Sites A through H. Appendix C of the Noise Assessment (Appendix O of this EIR) shows photographs of the sound system setup and measurement locations.

The results from the amplified music simulation were used in combination with SoundPlan Version 8.2 noise prediction model to project amplified music/speech from proposed on-site locations where background/ambient music would be played. To account for shielding provided by intervening topography, elevation data for the entire study area were input to the SoundPlan model to create a three-dimensional base map. Using aerial imagery and the project site plans, the SoundPlan model inputs for both hard surfaces, soft surfaces, and vegetated areas were applied.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the baseline and standards of significance identified above.

14-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, the impact is *less than significant.*

The proposed project would consist of construction of a network of wine caves, utility pad, processing/warehouse building, octagon building, gatehouse, and access improvements, including improvements to Callison Road along the project frontage, an on-site 100-foot diameter roundabout, and a 23-foot-wide paved private driveway. In addition, prior to the approval of Phase 2 improvement plans or within three years of occupancy of Phase 1, whichever occurs first, the project applicant will install a left-turn lane on Taylor Road at the Callison Road intersection. Construction activities associated with the project would require the use of numerous pieces of noise-generating equipment, such as excavating machinery (e.g., backhoes, bulldozers, excavators, front loaders) and other construction equipment (e.g., compactors, scrapers, graders), which would add to the noise environment in the immediate project vicinity. Construction worker traffic and construction-related material haul trips would additionally raise ambient noise levels along local haul routes, depending on the number of haul trips made and types of vehicles used.

The estimated equipment usage by phase is provided in Table 14-15. The range of maximum noise levels from anticipated project construction equipment operating at full power from a distance of 50 feet from the receptor is presented in Table 14-16. Based on the construction phasing and equipment sound level data presented therein, BAC predicted project construction equipment noise levels at the nearest existing residential uses (receivers R-1 through R-11). The anticipated noise levels at residences in the project vicinity are summarized in Table 14-17.

Table 14-15
Estimated Heavy Equipment by Project Construction Phase

Equipment	Construction Phase				
	Utility Pad	Gatehouse	Warehouse Building	Wine Cave	Octagon Building
Backhoe	X	X	X	X	X
Concrete mixer truck	X	X	X	X	X
Concrete pump truck	X	X	X	X	X
Crane			X		X
Dozer	X	X	X	X	X
Excavator			X	X	X
Grader		X	X		X
Loader			X	X	X
Paver			X	X	X
Saw		X	X		X
Truck	X	X	X	X	X

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-16
Reference Noise Levels for Construction Equipment

Equipment	Reference Maximum Noise Level at 50 Feet, L_{max} (dB)
Backhoe	80
Concrete Mixer Truck	85
Concrete Pump Truck	82
Crane	83
Dozer	85
Excavator	85
Grader	85
Loader	80
Paver	85
Saw	76
Truck	84

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-17
Summary of Predicted Construction Noise Levels at Nearest Residential Uses

Phase	Predicted Highest Maximum Noise Levels at Receiver Locations, L_{max} (dB)[1]										
	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9	R-10	R-11
Utility Pad	60	60	59	72	68	56	60	57	57	58	58
Gatehouse	54	54	60	60	79	65	74	63	61	59	59
Processing/ Warehouse Building	65	62	66	67	71	56	62	58	59	61	64
Wine Cave	63	64	69	68	64	55	60	57	57	59	60
Octagon Building	67	67	69	69	62	54	59	56	56	57	59

[1] Locations of residential receivers are shown in Figure 14-3.

Source: Bollard Acoustical Consultants, Inc., 2022.

Placer County Code Section 9.36.030(A)(7) exempts noise sources associated with construction activities, provided that such activities occur between the hours of 6:00 AM and 8:00 PM, Monday through Friday (during daylight savings), 7:00 AM and 8:00 PM, Monday through Friday (during standard time), and 8:00 AM and 6:00 PM, Saturday.

However, the exemption is provided on the basis that all construction equipment is fitted with factory-installed muffling devices and maintained in good working order. It is reasonably assumed that all noise-generating project construction equipment and activities would occur pursuant to Placer County Code Section 9.36.030(A)(7) and would, thereby, be exempt from the applicable noise level criteria.

Nonetheless, noise from heavy equipment operations during on-site construction activities would add to the noise environment in the immediate project vicinity. In terms of determining the temporary noise increase due to project-related construction activities, an impact would occur if construction activity would noticeably increase ambient noise levels above background levels. The threshold of perception of the human ear is approximately 3.0 to 5.0 dB, and a 5.0 dB change is considered to be clearly noticeable. As such, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5.0 dB or more above existing ambient noise levels.

Table 14-1 summarizes the results from the long-term ambient noise survey. Using the L_{max} noise levels presented in Table 14-1, and the highest predicted construction equipment noise levels at a given receiver, as shown in Table 14-17, BAC calculated the noise level increases at the nearest residential uses, due to project construction. The results of the calculations are presented in Table 14-18. Based on the data, increases in ambient noise levels from on-site construction activities would be below the applied significance criterion of 5.0 dB at all nearby residential receivers.

Table 14-18
Ambient Plus Project Construction Noise Increases at Residential Uses – Daytime L_{max} (dB)

Residential Receiver	Assessor's Parcel Number (APN)	Noise Level[1]	Ambient Plus Project[2]	Increase[3]
R-1	031-220-041	67	82.1	0.1
R-2	031-220-040	67	82.1	0.1
R-3	031-220-012	69	82.2	0.2
R-4	031-220-062	72	78.1	1.1
R-5	032-124-076	79	81.1	4.1
R-6	032-124-045	65	72.0	1.0
R-7	032-124-061	74	75.8	4.8
R-8	032-124-062	63	76.2	0.2
R-9	032-124-040	61	76.1	0.1
R-10	032-124-041	61	76.2	0.2
R-11	031-220-031	64	76.3	0.3

1 Predicted highest maximum noise levels at a receiver from any phase from Table 14-17.
2 Sum of predicted and highest average measured hourly daytime maximum noise levels.
3 Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc., 2022.

Based on the above, maximum noise levels associated with on-site construction activities would not result in a significant noise level increase to the nearest receptors. Therefore, the proposed project would not generate a substantial temporary increase in ambient noise levels in the project vicinity in excess of applicable standards, and a ***less-than-significant*** impact would occur.

Nevertheless, because Placer County Code Section 9.36.030(A)(7) requires that all construction equipment be fitted with factory-installed muffling devices and maintained in good working order, the County would require the following conditions of project approval to ensure consistency with the Placer County Noise Ordinance:

1. The following criteria shall be included in the Improvement Plans. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Community Development Resource Agency Director.

    - Noise-generating construction activities (e.g., construction, alteration, or repair activities), including truck traffic coming to and from the project site for any purpose, shall be limited to the hours outlined in Placer County Board of Supervisors Minute Order 90-08; specifically, a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM.
    - All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
    - All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project activity.
    - Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.
    - Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
    - Construction site and access road speed limits shall be established and enforced during the construction period.
    - Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Mitigation Measure(s)

None required.

14-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, the impact is *less than significant.*

Noise sources associated with the proposed project operations would consist of noise from project-generated traffic along roadways in the project vicinity, parking areas, on-site vehicle circulation, outdoor amplified music from the octagon building and warehouse building, outdoor event crowds, an emergency standby generator, and agricultural operations. The noise generated by each of the aforementioned components could result in impacts to existing noise-sensitive receptors in the project vicinity. Each of the foregoing noise sources are discussed in further detail below.

Traffic Noise

Using the methodology described above in the Method of Analysis section, traffic noise levels under Existing Plus Project conditions were estimated as part of the Noise Assessment for the weekday PM and Saturday noon peak hours and are shown in Table 14-19 and Table 14-20, in comparison to Existing conditions. Blank cells indicate traffic data was not provided. The estimated noise levels are provided in terms of DNL at a standard distance of 100 feet from the centerline of the selected roadways. In addition, the table includes an assessment of predicted traffic noise level increases relative to the FICON noise level increase significance criteria presented in Table 14-12.

As indicated in Table 14-19 and Table 14-20, the proposed project's contribution to traffic noise level increases would exceed applicable FICON increase significance criteria along only one roadway segment (29), which would be the primary access point to the project site. Specifically, the traffic noise level increase along the roadway segment would range from 43.4 to 43.9 dB DNL. However, baseline ambient noise conditions are considerably higher than baseline traffic noise levels alone. The project-generated traffic noise level along roadway segment 29 is calculated to be less than the measured ambient noise level of 54 dB DNL and would result in a project-generated noise level increase of less than 1.0 dB DNL. Such an increase is a more accurate representation of actual project-related noise level increases along segment 29 than the "traffic-only" noise increases of 43.9 and 43.4 dB DNL shown in Table 14-19 and Table 14-20, respectively. Thus, project-related increases in traffic noise levels would not substantially exceed measured ambient noise conditions along segment 29 relative to the applicable FICON criteria.

Finally, although existing residential uses are not within 100 feet from the centerline of roadway segment 29 (located on the project site), it should be noted that the predicted Existing Plus Project traffic noise levels of approximately 43 to 44 dB DNL at 100 feet along the segment is well below the unadjusted Placer County General Plan exterior noise level standard of 60 dB DNL applicable to traffic noise affecting residential uses.

Based on the analysis above, including consideration of measured ambient noise conditions within the project vicinity, potential off-site traffic noise impacts related to increases in traffic from development of the project (Existing versus Existing Plus Project) would be less than significant.

Table 14-19
Traffic Noise Under Existing and Existing Plus Project Conditions – Weekday PM Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			E	E+P	Increase	
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	60.0	60.0	0.0	No
2		South	59.3	59.3	0.0	No
3		East	58.0	58.0	0.0	No
4		West	61.6	61.6	0.0	No
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	54.0	54.0	0.0	No
6		South	48.1	48.1	0.0	No
7		East	58.9	58.9	0.0	No
8		West	59.3	59.3	0.0	No
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	53.4	53.4	0.0	No
10		South	57.2	57.3	0.1	No
11		East	60.0	60.0	0.0	No
12		West	54.6	54.7	0.1	No
13	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	North	60.0	60.0	0.0	No
14		South	55.6	55.6	0.0	No
15		East	62.6	62.6	0.0	No
16		West	58.9	58.9	0.0	No
17	(5) Old State Highway/Taylor Road	North	38.3	38.3	0.0	No
18		South	57.6	57.6	0.0	No
19		East	61.0	61.0	0.0	No
20		West	56.1	56.1	0.0	No
21	(6) Taylor Road/Callison Road	North	60.0	60.1	0.1	No
22		South	60.0	60.1	0.1	No
23		East	--	--	--	--
24		West	49.1	51.3	2.2	No
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	40.9	41.5	0.6	No
27		East	48.5	50.9	2.4	No
28		West	48.8	51.2	2.4	No
29	**(8) Project Driveway/Callison Road**	**North**	**--**	**43.9**	**43.9**	**Yes**
30		South	--	--	--	--
31		East	48.8	51.2	2.4	No
32		West	48.8	49.0	0.2	No
33	(9) Taylor Road/English Colony/Rock Springs Road	North	60.4	60.5	0.1	No
34		South	61.2	61.3	0.1	No
35		East	52.9	52.9	0.0	No
36		West	56.6	56.6	0.0	No
37	(10) Taylor Road/Penryn Road	North	61.5	61.6	0.1	No
38		South	59.7	59.7	0.0	No
39		East	59.0	59.1	0.1	No
40		West	33.5	33.5	0.0	No
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	59.6	59.7	0.1	No
42		South	60.8	60.8	0.0	No
43		East	58.7	58.7	0.0	No
44		West	58.1	58.1	0.0	No
45		North	60.8	60.8	0.0	No

(Continues on next page)

Table 14-19
Traffic Noise Under Existing and Existing Plus Project Conditions – Weekday PM Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			E	E+P	Increase	
46	(12) Penryn Road/I-80 EB Ramps/Boulder Creek	South	60.2	60.2	0.0	No
47		East	45.1	45.1	0.0	No
48		West	59.0	59.0	0.0	No

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-20
Traffic Noise Under Existing and Existing Plus Project Conditions – Saturday Noon Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			E	E+P	Increase	
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	58.3	58.3	0.0	No
2		South	58.0	58.0	0.0	No
3		East	57.5	57.5	0.0	No
4		West	60.6	60.6	0.0	No
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	52.2	52.2	0.0	No
6		South	47.4	47.4	0.0	No
7		East	57.9	57.9	0.0	No
8		West	58.0	58.0	0.0	No
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	53.1	53.1	0.0	No
10		South	58.1	58.1	0.0	No
11		East	59.4	59.5	0.1	No
12		West	53.5	53.6	0.1	No
13	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	North	59.5	59.6	0.1	No
14		South	55.5	55.5	0.0	No
15		East	62.1	62.1	0.0	No
16		West	58.0	58.1	0.1	No
17	(5) Old State Highway/Taylor Road	North	33.5	33.5	0.0	No
18		South	56.3	56.3	0.0	No
19		East	59.5	59.5	0.0	No
20		West	55.1	55.1	0.0	No
21	(6) Taylor Road/Callison Road	North	58.5	58.7	0.2	No
22		South	58.4	58.5	0.1	No
23		East	--	--	--	--
24		West	48.1	50.5	2.4	No
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	38.9	39.9	1.0	No
27		East	47.2	50.0	2.8	No
28		West	46.7	49.9	3.2	No
29	**(8) Project Driveway/Callison Road**	**North**	**--**	**43.4**	**43.4**	**Yes**
30		South	--	--	--	--
31		East	46.7	49.8	3.1	No
32		West	46.7	47.0	0.3	No
33		North	59.0	59.1	0.1	No

(Continues on next page)

Table 14-20
Traffic Noise Under Existing and Existing Plus Project Conditions – Saturday Noon Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			E	E+P	Increase	
34	(9) Taylor Road/English Colony/Rock Springs Road	South	60.4	60.5	0.1	No
35		East	52.3	52.3	0.0	No
36		West	56.1	56.1	0.0	No
37	(10) Taylor Road/Penryn Road	North	60.6	60.7	0.1	No
38		South	58.4	58.4	0.0	No
39		East	58.8	58.9	0.1	No
40		West	30.5	30.5	0.0	No
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	59.9	60.0	0.1	No
42		South	60.6	60.7	0.1	No
43		East	58.7	58.7	0.0	No
44		West	57.6	57.6	0.0	No
45	(12) Penryn Road/I-80 EB Ramps/Boulder Creek	North	60.6	60.7	0.1	No
46		South	59.6	59.6	0.0	No
47		East	45.4	45.4	0.0	No
48		West	58.3	58.3	0.0	No

Source: Bollard Acoustical Consultants, Inc., 2022.

Parking Area Noise

The proposed project consists of development of two primary parking areas, a parking lot located in the northern portion of the site, northeast of the octagon building, and parking located within the central portion of the site, adjacent to the southwest of the warehouse building (see Figure 14-4). The following analysis of project parking area noise exposure conservatively assumes worst-case parking activities that could occur on the property. Pursuant to the Noise Assessment, worst-case parking activity on the project site would occur during an Agricultural Promotional Event or Special Event.

For noise generated by on-site activities, the Placer County General Plan and Placer County Code noise level standards were applied to the proposed project. The County noise level limits are to be assessed at the property lines of receiving uses. In terms of determining the noise level increase due to on-site noise sources, an impact would occur if those sources would noticeably increase ambient noise levels above background levels. The threshold of perception to the human ear is approximately 3.0 to 5.0 dB, and a 5.0 dB change is considered clearly noticeable. For this analysis, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5.0 dB or more over existing ambient noise levels at existing residential uses.

The project's parking area noise exposure at the nearest residential uses relative to the applicable Placer County General Plan and Placer County Code noise level standards are summarized in Table 14-21.

Table 14-21
Worst-Case Parking Area Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2,3]			Applied County Standards (dB)[4]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	31	33	44	70	67	75
R-2	031-220-040	24	26	37	70	67	75
R-3	031-220-012	31	33	45	70	67	75
R-4	031-220-062	42	44	55	61	67	80
R-5	032-124-076	32	34	49	61	67	80
R-6	032-124-045	21	23	36	52	55	72
R-7	032-124-061	27	29	43	52	55	72
R-8	032-124-062	24	26	39	54	59	76
R-9	032-124-040	23	25	39	54	59	76
R-10	032-124-041	25	27	41	54	59	76
R-11	031-220-031	26	28	43	54	59	76

1 Locations of residential receivers and property boundaries are illustrated on Figure 14-3.
2 Predicted noise levels reflect activities from both parking areas combined/concurrently.
3 Predicted noise levels include shielding offsets to account for intervening topography, where applicable.
4 Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

As indicated, the worst-case project parking area noise levels experienced at nearby residences would comply with the applied Placer County General Plan exterior DNL standards at the property lines of the nearest existing residential uses by a wide margin. In addition, standard residential construction (e.g., stucco siding, Sound Transmission Class [STC]-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior-to-interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given the exterior-to-interior noise reduction typically achieved from standard residential construction and based on the predicted exterior noise levels shown in Table 14-21, noise from project parking areas experienced at nearby residences would be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the data indicate that worst-case project parking noise level exposure would comply with the applied Placer County Code exterior L_{eq} and L_{max} noise level standards at the nearest existing residential uses by a wide margin.

Using the lowest measured DNL, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the worst-case parking area noise levels presented in Table 14-21, ambient plus project parking noise level increases were calculated at the nearest residential uses. The results are presented in Table 14-22 through Table 14-24.

As shown in the tables below, the increases in ambient noise levels from worst-case project parking activities would be well below the applied increase significance criterion of 5.0 dB and would comply with applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses. Therefore, noise

exposure from parking area activities at nearby residences would result in a less-than-significant impact.

Table 14-22
Ambient Plus Project Parking Noise Increases at Nearest Residential Uses – DNL (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	31	70.0	<0.1
R-2	031-220-040	24	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	42	61.1	<0.1
R-5	032-124-076	32	61.0	<0.1
R-6	032-124-045	21	52.0	<0.1
R-7	032-124-061	27	52.0	<0.1
R-8	032-124-062	24	54.0	<0.1
R-9	032-124-040	23	54.0	<0.1
R-10	032-124-041	25	54.0	<0.1
R-11	031-220-031	26	54.0	<0.1

1 Predicted noise levels from Table 14-21.
2 Sum of predicted and measured ambient day-night average noise levels.
3 Calculated increase in ambient day-night average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-23
Ambient Plus Project Parking Noise Increases at Nearest Residential Uses – Daytime L_{eq} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	33	62.0	<0.1
R-2	031-220-040	26	62.0	<0.1
R-3	031-220-012	33	62.0	<0.1
R-4	031-220-062	44	62.1	0.1
R-5	032-124-076	34	62.0	<0.1
R-6	032-124-045	23	49.0	<0.1
R-7	032-124-061	29	49.0	<0.1
R-8	032-124-062	26	54.0	<0.1
R-9	032-124-040	25	54.0	<0.1
R-10	032-124-041	27	54.0	<0.1
R-11	031-220-031	28	54.0	<0.1

1 Predicted noise levels from Table 14-21.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-24
Ambient Plus Project Parking Noise Increases at Nearest Residential Uses – Daytime L_{max} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	44	70.0	<0.1
R-2	031-220-040	37	70.0	<0.1
R-3	031-220-012	45	70.0	<0.1
R-4	031-220-062	55	75.0	<0.1
R-5	032-124-076	49	75.0	<0.1
R-6	032-124-045	36	67.0	<0.1
R-7	032-124-061	43	67.0	<0.1
R-8	032-124-062	39	71.0	<0.1
R-9	032-124-040	39	71.0	<0.1
R-10	032-124-041	41	71.0	<0.1
R-11	031-220-031	43	71.0	<0.1

1 Predicted noise levels from Table 14-21.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

On-Site Circulation Noise

The primary project site access point for vehicles would be located off Callison Road. Once on-site, vehicles would travel north on a private road to the centrally located warehouse building and/or to the octagon building at the north end of the property (see Figure 14-5). The following analysis of on-site vehicle circulation noise exposure conservatively assumes worst-case on-site vehicle circulation that could occur on-site, which would be during a Special Event. A Special Event is expected to generate approximately 80 peak hour trips during a worst-case, busy PM peak hour.

Assuming an on-site vehicle speed of less than 25 miles per hour (mph) on the private driveway, project worst-case on-site traffic circulation noise exposure at the property lines of the nearest residential uses was calculated, the results of which are presented in Table 14-25. As part of calculating project on-site traffic circulation noise generation relative to the Placer County General Plan DNL noise level criteria, the hours in which worst-case on-site vehicle circulation would occur would be between the hours of 10:00 AM and 10:00 PM.

The Table 14-25 data indicate that worst-case project on-site vehicle circulation noise exposure would comply with the applied General Plan exterior DNL noise level standards at the property lines of the nearest existing residential uses by a wide margin. Furthermore, based on the exterior-to-interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open) and the predicted exterior noise levels shown in Table 14-25, on-site vehicle circulation noise level exposure would be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the data indicate that worst-case on-site vehicle circulation noise level exposure would comply with the applied Placer County Code exterior daytime L_{eq} and L_{max} noise level standards at the nearest existing residential uses.

Table 14-25
Worst-Case On-Site Vehicle Circulation Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	36	38	48	70	67	75
R-2	031-220-040	35	37	47	70	67	75
R-3	031-220-012	31	33	43	70	67	75
R-4	031-220-062	46	48	58	61	67	80
R-5	032-124-076	43	45	55	61	67	80
R-6	032-124-045	35	37	47	52	55	72
R-7	032-124-061	45	47	57	52	55	72
R-8	032-124-062	39	41	51	54	59	76
R-9	032-124-040	30	32	42	54	59	76
R-10	032-124-041	31	33	43	54	59	76
R-11	031-220-031	31	33	43	54	59	76

1 Locations of residential receivers and property boundaries are illustrated on Figure 14-3.
2 Predicted noise levels conservatively assume all vehicle trips occurring nearest to receivers. Predicted noise levels include shielding offsets to account for intervening topography, where applicable. Calculated DNL conservatively assumes PM peak hour vehicle trips occurring during every hour from 10:00 AM to 10:00 PM. Predicted L_{max} noise levels conservatively assumed to be 10 dB higher than predicted hourly L_{eq}.
3 Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Using the lowest measured DNL, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the worst-case on-site vehicle circulation noise levels presented in Table 14-24, BAC calculated ambient plus project on-site vehicle circulation noise level increases at the nearest residential uses, the results of which are presented in Table 14-26 through Table 14-28. As shown in the tables, the increases in ambient noise levels from worst-case project on-site vehicle circulation would be below the applied increase significance criterion of 5.0 dB and would comply with applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses. Therefore, noise exposure from on-site vehicle circulation at nearby residences would result in a less-than-significant impact.

Outdoor Amplified Music Noise

Outdoor activities are proposed to occur on the terrace outside the entry level of the octagon building, as well as on the roof terrace of the warehouse building. The locations of the proposed octagon and warehouse buildings are shown in Figure 14-5. Amplified music/live speech would occasionally occur at the foregoing locations during outdoor activities to create ambiance. Proposed amplified music would include, but would not be limited to, live, light music played by a string quartet, chamber group, or pianist through a small, single amplifier. Neither indoor nor outdoor concerts are proposed as part of the project. Amplified music would occur only between the hours of 10:00 AM to 5:00 PM (events and tasting room hours) and 5:00 PM to 8:00 PM (events only).

Table 14-26
Ambient Plus Project On-Site Vehicle Circulation Noise Increases at Nearest Residential Uses – DNL (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	36	70.0	<0.1
R-2	031-220-040	35	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	46	61.1	0.1
R-5	032-124-076	43	61.1	0.1
R-6	032-124-045	35	52.1	0.1
R-7	032-124-061	45	52.8	0.8
R-8	032-124-062	39	54.1	0.1
R-9	032-124-040	30	54.0	<0.1
R-10	032-124-041	31	54.0	<0.1
R-11	031-220-031	31	54.0	<0.1

1 Predicted noise levels from Table 14-25.
2 Sum of predicted and measured ambient day-night average noise levels.
3 Calculated increase in ambient day-night average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-27
Ambient Plus Project On-Site Vehicle Circulation Noise Increases at Nearest Residential Uses – Daytime L_{eq} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	38	62.0	<0.1
R-2	031-220-040	37	62.0	<0.1
R-3	031-220-012	33	62.0	<0.1
R-4	031-220-062	48	62.2	0.2
R-5	032-124-076	45	62.1	0.1
R-6	032-124-045	37	49.3	0.3
R-7	032-124-061	47	51.2	2.2
R-8	032-124-062	41	54.2	0.2
R-9	032-124-040	32	54.0	<0.1
R-10	032-124-041	33	54.0	<0.1
R-11	031-220-031	33	54.0	<0.1

1 Predicted noise levels from Table 14-25.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Figure 14-5
Outdoor Amplified Music Noise Contours - Daytime L_{eq}

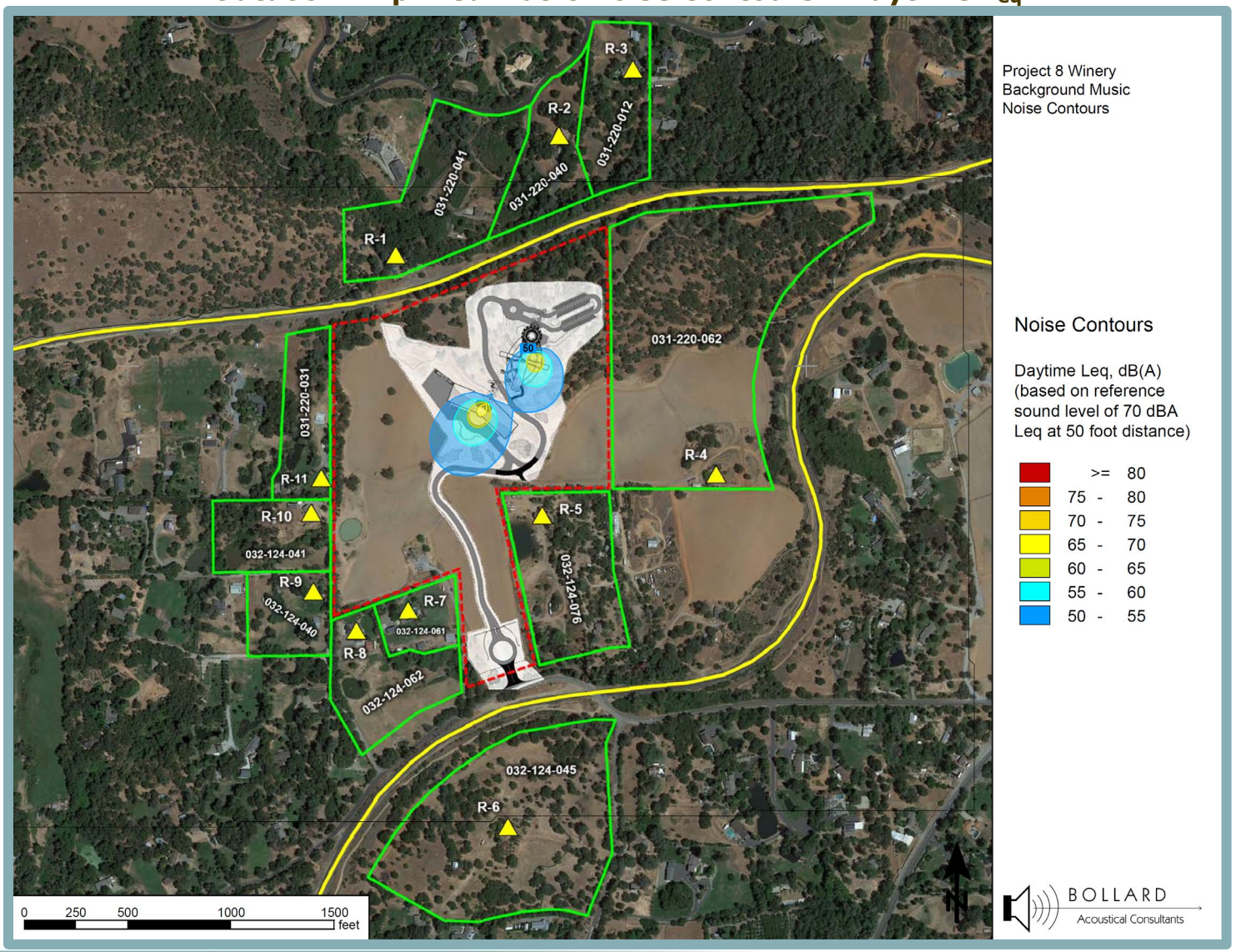


Table 14-28
Ambient Plus Project On-Site Vehicle Circulation Noise Increases at Nearest Residential Uses – Daytime L_{max} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	48	70.0	<0.1
R-2	031-220-040	47	70.0	<0.1
R-3	031-220-012	43	70.0	<0.1
R-4	031-220-062	58	75.1	0.1
R-5	032-124-076	55	75.0	<0.1
R-6	032-124-045	47	67.0	<0.1
R-7	032-124-061	57	67.4	0.4
R-8	032-124-062	51	71.0	<0.1
R-9	032-124-040	42	71.0	<0.1
R-10	032-124-041	43	71.0	<0.1
R-11	031-220-031	43	71.0	<0.1

1 Predicted noise levels from Table 14-25.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-29
Outdoor Amplified Music Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	32	25	31	70	62	70
R-2	031-220-040	<20	<20	<20	70	62	70
R-3	031-220-012	<20	<20	<20	70	62	70
R-4	031-220-062	37	31	36	61	62	75
R-5	032-124-076	47	40	45	61	62	75
R-6	032-124-045	39	33	37	52	50	67
R-7	032-124-061	46	39	44	52	50	67
R-8	032-124-062	43	36	41	54	54	71
R-9	032-124-040	43	37	42	54	54	71
R-10	032-124-041	44	37	43	54	54	71
R-11	031-220-031	42	35	40	54	54	71

1 Locations of residential receivers and property boundaries are illustrated on Figure 14-3.
2 Predicted noise levels include consideration of the results from the BAC simulation and SoundPlan modeling.
3 Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Using the methodology described above in the Method of Analysis section, BAC quantified the noise levels that would be generated from project-associated amplified music/speech through conducting short-term noise level measurements on Tuesday, March 29, 2022 during a simulated event with amplified music. The results from the SoundPlan model

projections at the property lines of the nearest existing residential uses are shown graphically in Figure 14-5 and Figure 14-6 with noise contours, and are summarized in Table 14-29.

The results include consideration of amplified music/speech occurring at both proposed locations concurrently (octagon building and warehouse building terrace areas).

As indicated in Table 14-29, project outdoor amplified music noise exposure would comply with the applied General Plan exterior DNL noise level standards at the property lines of the nearest existing residential uses. Furthermore, based on the exterior-to-interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open) and the predicted exterior noise levels shown in Table 14-29, project outdoor amplified music noise level exposure would be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences.

Finally, the data indicate that project outdoor amplified music noise level exposure would comply with the applied Placer County Code exterior daytime L_{eq} and L_{max} noise level standards at the nearest existing residential uses. Compliance with the applied General Plan and Placer County Code noise level criteria identified above includes consideration of the County's 5.0 dB downward adjustment to standards for noise sources consisting primarily of music and speech.

Using the lowest measured DNL, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the outdoor amplified music noise levels presented in Table 14-29, ambient plus project amplified music noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Table 14-30 through Table 14-32.

Table 14-30
Ambient Plus Project Outdoor Amplified Music Noise Increases at Nearest Residential Uses – DNL (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	32	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	37	61.0	<0.1
R-5	032-124-076	47	61.2	0.2
R-6	032-124-045	39	52.2	0.2
R-7	032-124-061	46	52.9	0.9
R-8	032-124-062	43	54.3	0.3
R-9	032-124-040	43	54.4	0.4
R-10	032-124-041	44	54.4	0.4
R-11	031-220-031	42	54.2	0.2

1 Predicted noise levels from Table 14-29.
2 Sum of predicted and measured ambient day-night average noise levels.
3 Calculated increase in ambient day-night average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Figure 14-6
Outdoor Amplified Music Noise Contours - Daytime L_{max}

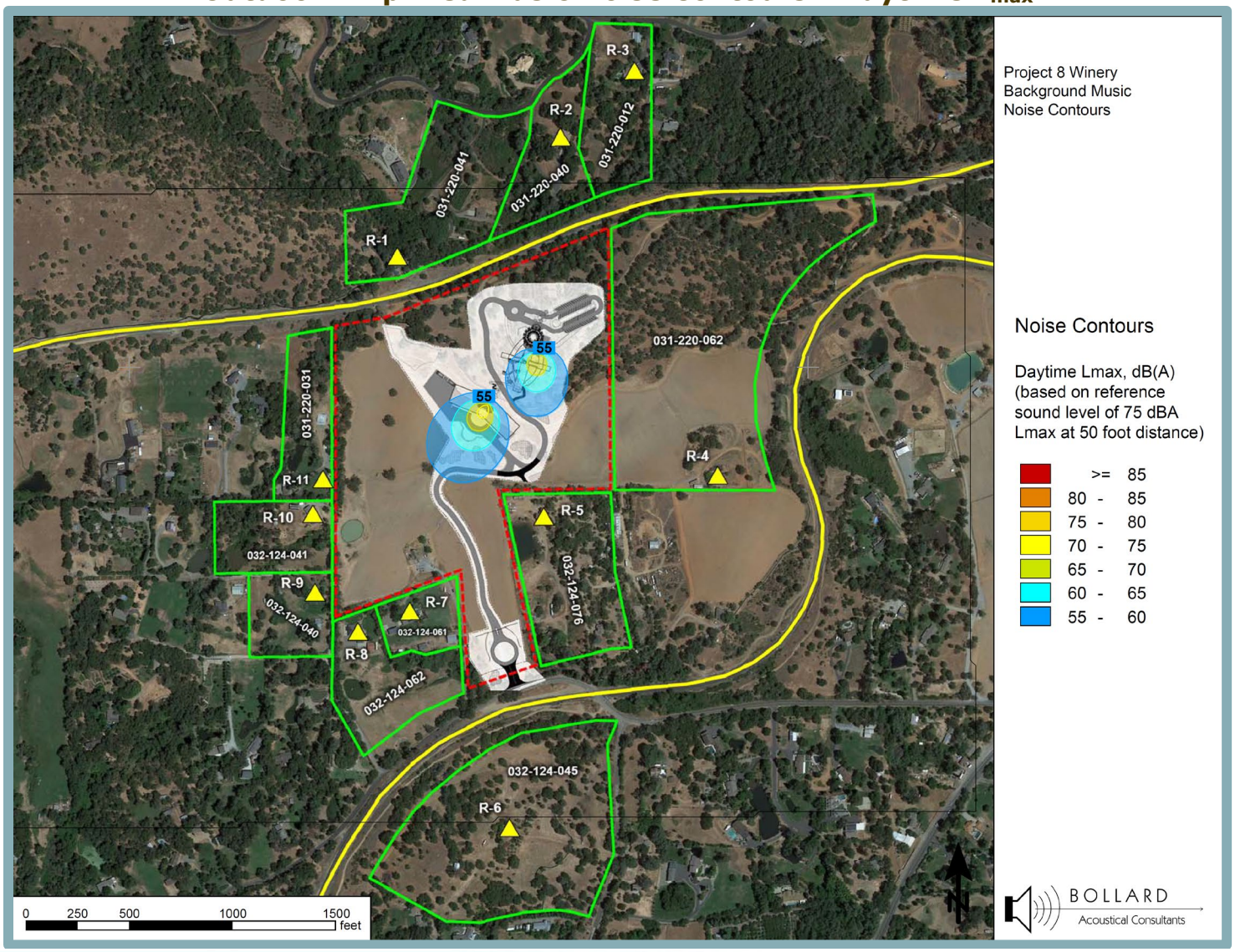


Table 14-31
Ambient Plus Project Outdoor Amplified Music Noise Increases at Nearest Residential Uses – Daytime L_{eq} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	25	62.0	<0.1
R-2	031-220-040	<20	62.0	<0.1
R-3	031-220-012	<20	62.0	<0.1
R-4	031-220-062	31	62.0	<0.1
R-5	032-124-076	40	62.0	<0.1
R-6	032-124-045	33	49.1	0.1
R-7	032-124-061	39	49.4	0.4
R-8	032-124-062	36	54.1	0.1
R-9	032-124-040	37	54.1	0.1
R-10	032-124-041	37	54.1	0.1
R-11	031-220-031	35	54.1	0.1

1 Predicted noise levels from Table 14-29.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-32
Ambient Plus Project Outdoor Amplified Music Noise Increases at Nearest Residential Uses – Daytime L_{max} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	31	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	36	75.0	<0.1
R-5	032-124-076	45	75.0	<0.1
R-6	032-124-045	37	67.0	<0.1
R-7	032-124-061	44	67.0	<0.1
R-8	032-124-062	41	71.0	<0.1
R-9	032-124-040	42	71.0	<0.1
R-10	032-124-041	43	71.0	<0.1
R-11	031-220-031	40	71.0	<0.1

1 Predicted noise levels from Table 14-29.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

As shown in the tables above, the increases in ambient noise levels from project outdoor amplified music would be well below the applied increase significance criterion of 5.0 dB and would comply with applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses. Therefore, noise exposure from project outdoor amplified music at nearby residences would result in a less-than-significant impact.

Outdoor Event Crowd Noise

The proposed project would include Agricultural Promotional Events and Special Events. The maximum capacity for project Agricultural Promotional Events would be limited to 75 people per event at one time and could occur during any day of the week between the hours of 7:00 AM and 10:00 PM. The maximum capacity for project Special Events would be limited to 200 people per event at one time and could occur during any day of the week between the hours of 10:00 AM and 10:00 PM. The following analysis evaluates the noise generation potential of a worst-case, large crowd of 200 people (Special Event) at the two primary event function areas on the property, the octagon and warehouse building areas.

To quantify event-generated crowd noise at nearby noise-sensitive receivers, BAC used reference file data for persons speaking in casual, normal, and raised voices (casual = 52 dB per person at three feet; normal voice = 57 dB per person at three feet; raised voice = 64 dB per person at three feet). Using the provided reference file data and conservatively assuming 50 percent of a 200-person crowd conversing simultaneously (100 people speaking, 100 people listening) while also assuming standard spherical spreading loss (-6.0 dB per doubling of distance), BAC projected data from the effective noise center of the two primary event function areas on the project site (octagon and warehouse buildings) to the property lines of the nearest existing residential uses (receivers R-1 through R-11). The results of the projections relative to the applicable Placer County General Plan and Placer County Code noise level standards are summarized in Table 14-33.

Table 14-33
Worst-Case Outdoor Event Crowd Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	26	28	33	70	62	70
R-2	031-220-040	26	28	33	70	62	70
R-3	031-220-012	22	24	29	70	62	70
R-4	031-220-062	34	36	41	61	62	75
R-5	032-124-076	32	34	39	61	62	75
R-6	032-124-045	21	23	28	52	50	67
R-7	032-124-061	27	29	34	52	50	67
R-8	032-124-062	24	26	31	54	54	71
R-9	032-124-040	24	26	31	54	54	71
R-10	032-124-041	26	28	33	54	54	71
R-11	031-220-031	28	30	35	54	54	71

1 Locations of residential receivers and property boundaries are illustrated on Figure 14-3.
2 Predicted noise levels from a 200-person Special Event occurring at the nearest event area to the receiver. Predicted noise levels include shielding offsets to account for intervening topography, where applicable. Calculated DNL conservatively assumes crowd conversation occurring continuously throughout an entire 200-person Special Event (10:00 AM to 10:00 PM).
3 Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

The Table 14-33 data indicate that worst-case project crowd noise exposure is predicted to comply with the applied General Plan exterior DNL noise level standards at the property

lines of the nearest existing residential uses by a wide margin. Furthermore, based on the exterior-to-interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open) and the predicted exterior noise levels shown in Table 14-33, project crowd noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences.

Finally, the Table 14-33 data indicate that worst-case project crowd noise level exposure would comply with the applied Placer County Code exterior daytime L_{eq} and L_{max} noise level standards at the nearest existing residential uses. Compliance with the applied General Plan and Placer County Code noise level criteria identified above includes consideration of the County's 5.0 dB downward adjustment to standards for noise sources consisting primarily of music and speech.

Using the lowest measured DNL noise levels, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the outdoor event crowd noise levels presented in Table 14-33, ambient plus project crowd noise level increases were calculated at the nearest residential uses, the results of which are presented in Table 14-34 through Table 14-36. As shown in the tables below, the increases in ambient noise levels from worst-case project crowd conversation would be well below the applied increase significance criterion of 5.0 dB and would comply with applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses. Therefore, noise exposure from project outdoor event crowd noise at nearby residences would result in a less-than-significant impact.

Table 14-34
Ambient Plus Project Outdoor Event Crowd Noise Increases at Residential Uses – DNL (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	26	70.0	<0.1
R-2	031-220-040	26	70.0	<0.1
R-3	031-220-012	22	70.0	<0.1
R-4	031-220-062	34	61.0	<0.1
R-5	032-124-076	32	61.0	<0.1
R-6	032-124-045	21	52.0	<0.1
R-7	032-124-061	27	52.0	<0.1
R-8	032-124-062	24	54.0	<0.1
R-9	032-124-040	24	54.0	<0.1
R-10	032-124-041	26	54.0	<0.1
R-11	031-220-031	28	54.0	<0.1

1 Predicted noise levels from Table 14-33.
2 Sum of predicted and measured ambient day-night average noise levels.
3 Calculated increase in ambient day-night average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-35
Ambient Plus Project Outdoor Event Crowd Noise Increases at Residential Uses – Daytime L_{eq} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	28	62.0	<0.1
R-2	031-220-040	28	62.0	<0.1
R-3	031-220-012	24	62.0	<0.1
R-4	031-220-062	36	62.0	<0.1
R-5	032-124-076	34	62.0	<0.1
R-6	032-124-045	23	49.0	<0.1
R-7	032-124-061	29	49.0	<0.1
R-8	032-124-062	26	54.0	<0.1
R-9	032-124-040	26	54.0	<0.1
R-10	032-124-041	28	54.0	<0.1
R-11	031-220-031	30	54.0	<0.1

1 Predicted noise levels from Table 14-33.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-36
Ambient Plus Project Outdoor Event Crowd Noise Increases at Residential Uses – Daytime L_{max} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	33	70.0	<0.1
R-2	031-220-040	33	70.0	<0.1
R-3	031-220-012	29	70.0	<0.1
R-4	031-220-062	41	75.0	<0.1
R-5	032-124-076	39	75.0	<0.1
R-6	032-124-045	28	67.0	<0.1
R-7	032-124-061	34	67.0	<0.1
R-8	032-124-062	31	71.0	<0.1
R-9	032-124-040	31	71.0	<0.1
R-10	032-124-041	33	71.0	<0.1
R-11	031-220-031	35	71.0	<0.1

1 Predicted noise levels from Table 14-33.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Emergency Generator Noise

The proposed project would include installation of an emergency standby generator on an on-site utility pad. The location of the proposed utility pad is shown in Figure 14-5. The generator is anticipated to be a MQ Power WhisperWatt 600 diesel generator, which, according to the equipment manufacturer, has a reference sound level of 71 dB at a distance of 23 feet.

The emergency standby generator would only operate during emergencies (i.e., power outages). Excluding emergency operation, operation of the equipment typically occurs for brief daytime periods for periodic maintenance/lubrication (i.e., approximately 15 minutes or less), according to BAC noise studies for similar emergency generators. For the purposes of this analysis, operation of the project generator for emergency purposes is reasonably assumed to be exempt from County noise level exposure standards. Because normal operation of the project generator is expected to periodically occur for brief daytime periods only for testing and maintenance, and because project generator noise is reasonably assumed to be exempt from County noise level exposure standards during emergency operations, project emergency generator noise was assessed relative to the County Code's maximum (L_{max}) daytime noise level standard. To calculate project generator noise relative to the General Plan DNL noise level standard, the generator was assumed to be operating continuously for a one-hour period during daytime hours for routine testing and maintenance in order to provide a conservative assessment.

Based on the above, the project site plans (for scaling distances), and assuming standard spherical spreading loss (-6.0 dB per doubling of distance), project emergency generator noise exposure at the property lines of the nearest existing residential uses (receivers R-1 through R-11) was calculated. The results of the calculations relative to the applicable Placer County General Plan and Placer County Code noise level standards are summarized in Table 14-37.

Table 14-37
Predicted Emergency Generator Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]		Applied County Standards (dB)[3]	
		DNL	L_{max}	DNL	Daytime L_{max}
R-1	031-220-041	<20	32	70	75
R-2	031-220-040	<20	32	70	75
R-3	031-220-012	<20	31	70	75
R-4	031-220-062	37	51	61	80
R-5	032-124-076	34	47	61	80
R-6	032-124-045	<20	30	52	72
R-7	032-124-061	21	34	52	72
R-8	032-124-062	<20	32	54	76
R-9	032-124-040	22	36	54	76
R-10	032-124-041	20	33	54	76
R-11	031-220-031	24	37	54	76

1 Locations of residential receivers and property boundaries are illustrated on Figure 14-2.
2 Calculated DNL conservatively assumes one-hour of generator operation during a given daytime hour.
3 Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

As indicated in Table 14-37, project emergency generator noise exposure would comply with the applied General Plan exterior DNL noise level standards at the property lines of the nearest existing residential uses by a wide margin. In addition, based on the exterior-to-interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open)

and the predicted exterior noise levels shown in Table 14-37, project emergency generator noise exposure would be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the data indicate that project emergency generator noise level exposure is predicted to comply with the applied Placer County Code exterior daytime L_{max} noise level standards at the nearest existing residential uses by a wide margin.

Using the lowest measured DNL, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the predicted emergency generator noise levels presented in Table 14-37, ambient plus project generator noise level increases were calculated at the nearest residential uses, the results of which are presented in Table 14-38 and Table 14-39.

As shown in the tables below, the increases in ambient noise levels from the project emergency generator would be well below the applied increase significance criterion of 5.0 dB and would comply with applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses. Therefore, noise exposure from the project emergency generator at nearby residences would result in a less-than-significant impact.

Table 14-38
Ambient Plus Project Emergency Generator Noise Increases at Residential Uses – DNL (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	<20	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	37	61.0	<0.1
R-5	032-124-076	34	61.0	<0.1
R-6	032-124-045	<20	52.0	<0.1
R-7	032-124-061	21	52.0	<0.1
R-8	032-124-062	<20	54.0	<0.1
R-9	032-124-040	22	54.0	<0.1
R-10	032-124-041	20	54.0	<0.1
R-11	031-220-031	24	54.0	<0.1

1 Predicted noise levels from Table 14-37.
2 Sum of predicted and measured ambient day-night average noise levels.
3 Calculated increase in ambient day-night average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Agricultural Operations Noise

The proposed project would include agricultural operations, which would consist of the development of a processing warehouse building to support bottling, product storage, supply storage, equipment storage, and shipping/receiving with a fully enclosed truck dock. The primary noise sources associated with on-site agricultural operations would include on-site heavy truck passbys, loading dock operations, forklifts, and processing equipment within the warehouse building.

Table 14-39
Ambient Plus Project Emergency Generator Noise Increases at Residential Uses – Daytime L_{max} (dB)

Residential Receiver	APN	Predicted Noise Level[1]	Ambient Plus Project[2]	Increase in Ambient[3]
R-1	031-220-041	32	70.0	<0.1
R-2	031-220-040	32	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	51	75.0	<0.1
R-5	032-124-076	47	75.0	<0.1
R-6	032-124-045	30	67.0	<0.1
R-7	032-124-061	34	67.0	<0.1
R-8	032-124-062	32	71.0	<0.1
R-9	032-124-040	36	71.0	<0.1
R-10	032-124-041	33	71.0	<0.1
R-11	031-220-031	37	71.0	<0.1

1 Predicted noise levels from Table 14-37.
2 Sum of predicted and measured ambient daytime noise levels.
3 Calculated increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

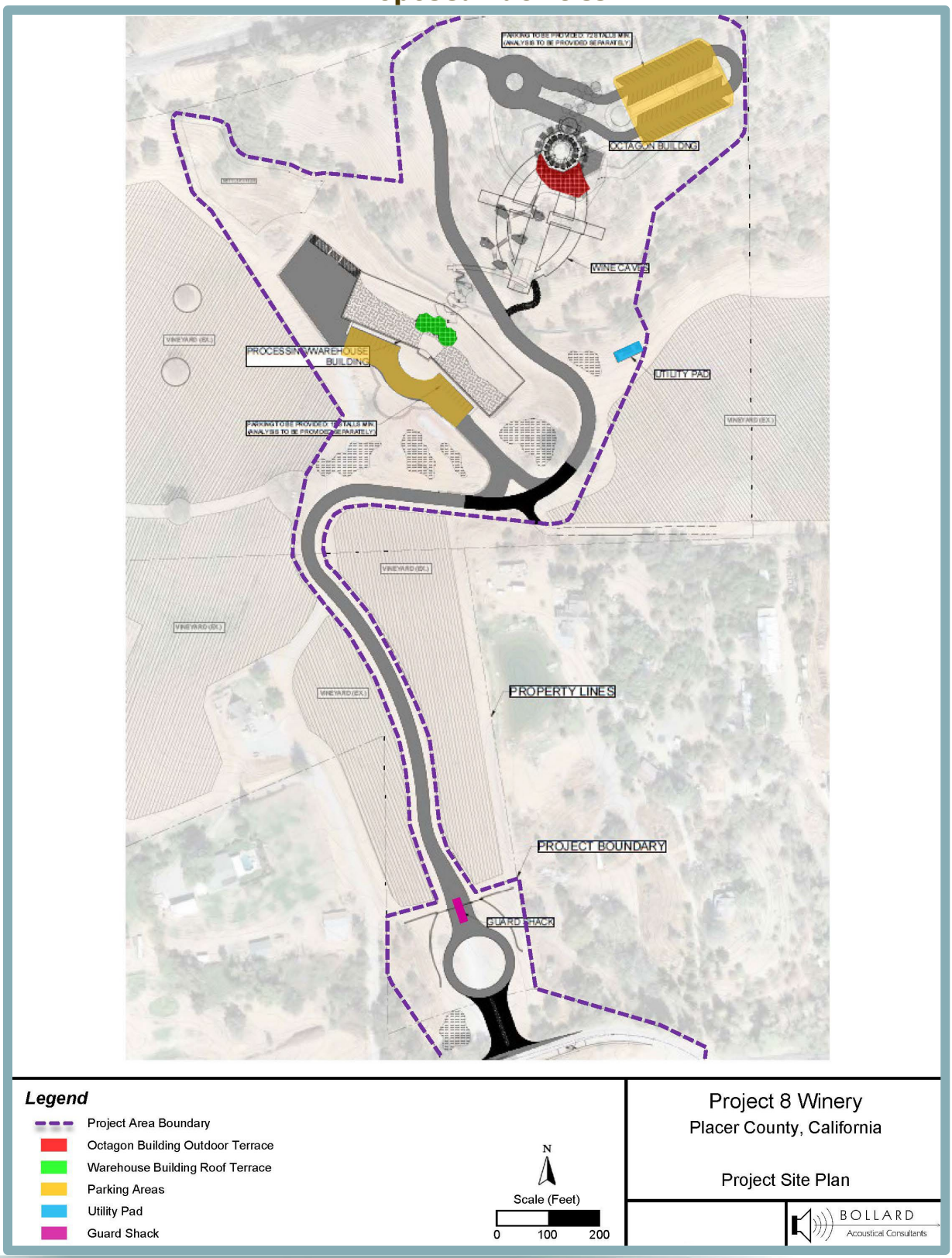
Operations associated with the growing, maintenance, and harvesting of grapes already occur within the project site. Noise sources associated with existing on-site agricultural operations include on-site heavy truck circulation and forklift usage activities. In addition, all processing equipment and activities associated with the proposed agricultural operations would be located within the warehouse building. Noise sources associated with processing would include bottling equipment and crushing activities. Based on the above, the warehouse structure would provide a significant degree of interior-to-exterior sound attenuation of the interior processing equipment. Additionally, the warehouse building loading dock would be fully enclosed, which would significantly attenuate shipping/receiving activity noise levels. Accordingly, increases in ambient noise levels from project processing equipment and/or shipping/receiving activities are not expected at nearby residential receivers.

Furthermore, pursuant to Placer County Code Section 9.36.030 (Exemptions), noise associated with agricultural operations on agricultural land, which are carried out in any manner consistent with the practice and within the standards of the agricultural industry, is exempt. For the purposes of this assessment, on-site agricultural operations are reasonably assumed to occur in accordance with Placer County Code Section 9.36.030 and would, therefore, be exempt from the County's noise level standards. Therefore, noise generated by the proposed agricultural operations would result in a less-than-significant impact.

Combined Project Noise

The locations of the proposed facilities are identified in Figure 14-7. The calculated combined noise level exposure from all of the above analyzed on-site noise sources at the nearest existing residential uses (receivers R-1 through R-11) is shown in Table 14-40 through Table 14-42.

Figure 14-7
Proposed Facilities



It should be noted that due to the logarithmic nature of the decibel scale, the sum of two noise values which differ by 10 dB equates to an overall increase in noise levels of 0.4 dB. When the noise sources are equivalent, the sum would result in an overall increase in noise levels of 3.0 dB.

As indicated in Table 14-40 through Table 14-42 the calculated combined noise level exposure from all on-site operations would comply with the applied Placer County General Plan exterior DNL noise level standards at the property lines of the nearest existing residential uses. Furthermore, based on the exterior-to-interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open) and based on the predicted exterior noise levels in shown in the tables above, combined project noise level exposure would be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the data provided in the tables indicate that combined project noise level exposure would comply with the applied Placer County Code exterior daytime L_{eq} and L_{max} noise level standards at the nearest existing residential uses.

Using the lowest measured DNL, average measured hourly, and maximum daytime noise levels presented in Table 14-1, and the predicted combined project noise levels presented in Table 14-40, ambient plus combined project noise level increases were calculated at the nearest residential uses, the results of which are shown in Table 14-43 through Table 14-45.

Table 14-40
Calculated Combined Project Operations Noise Levels at Residential Uses – DNL (dB)

	Predicted Noise Levels						
Rec.	Parking	On-Site Circulation	Outdoor Amplified Music	Outdoor Event Crowd	Generator	Combined[1]	Applied County Standard[2]
R-1	31	36	32	26	<20	38	70
R-2	24	35	<20	26	<20	36	70
R-3	31	31	<20	22	<20	34	70
R-4	42	46	37	34	37	48	61
R-5	32	43	47	32	34	49	61
R-6	21	35	39	21	<20	41	52
R-7	27	45	46	27	21	49	52
R-8	24	39	43	24	<20	44	54
R-9	23	31	43	24	22	44	54
R-10	25	31	44	26	23	44	54
R-11	26	31	42	28	24	42	54

[1] Calculated cumulative noise levels based on predicted noise levels presented in Impacts 14-2.
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-41
Calculated Combined Project Operations Noise Levels at Residential Uses – Daytime L_{eq} (dB)

Rec.	Predicted Noise Levels					Combined[1]	Applied County Standard[2]
	Parking	On-Site Circulation	Outdoor Amplified Music	Outdoor Event Crowd	Generator		
R-1	33	38	25	28	--	39	67
R-2	26	37	<20	28	--	38	67
R-3	33	33	<20	24	--	36	67
R-4	44	48	31	36	--	50	67
R-5	34	45	40	34	--	47	67
R-6	23	37	33	23	--	39	55
R-7	29	47	39	29	--	48	55
R-8	26	41	36	26	--	43	59
R-9	25	32	37	26	--	38	59
R-10	27	33	37	28	--	39	59
R-11	28	33	35	30	--	38	59

[1] Calculated cumulative noise levels based on predicted noise levels presented in Impacts 14-2.
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-42
Calculated Combined Project Operations Noise Levels at Residential Uses – Daytime L_{max} (dB)

Rec.	Predicted Noise Levels					Combined[1]	Applied County Standard[2]
	Parking	On-Site Circulation	Outdoor Amplified Music	Outdoor Event Crowd	Generator		
R-1	33	38	25	28	--	39	75
R-2	26	37	<20	28	--	38	75
R-3	33	33	<20	24	--	36	75
R-4	44	48	31	36	--	50	80
R-5	34	45	40	34	--	47	80
R-6	23	37	33	23	--	39	72
R-7	29	47	39	29	--	48	72
R-8	26	41	36	26	--	43	76
R-9	25	32	37	26	--	38	76
R-10	27	33	37	28	--	39	76
R-11	28	33	35	30	--	38	76

[1] Calculated cumulative noise levels based on predicted noise levels presented in Impacts 14-2.
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-43
Ambient Plus Combined Project Noise Increases at Residential Uses – DNL (dB)

Residential Receiver	Calculated Combined Noise Level[1]	Ambient Plus Project[2]	Overall Increase in Ambient[3]
R-1	38	70.0	<0.1
R-2	36	70.0	<0.1
R-3	34	70.0	<0.1
R-4	48	61.2	0.2
R-5	49	61.2	0.2
R-6	41	52.3	0.3
R-7	49	53.6	1.6
R-8	44	54.5	0.5
R-9	44	54.4	0.4
R-10	44	54.4	0.4
R-11	42	54.3	0.3

1 Calculated combined noise levels from Table 14-40.
2 Sum of calculated combined and measured ambient daytime noise levels.
3 Calculated combined increase in ambient daytime noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-44
Ambient Plus Combined Project Noise Increases at Residential Uses – Daytime L_{eq} (dB)

Residential Receiver	Calculated Combined Noise Level[1]	Ambient Plus Project[2]	Overall Increase in Ambient[3]
R-1	39	62.0	<0.1
R-2	38	62.0	<0.1
R-3	36	62.0	<0.1
R-4	50	62.3	0.3
R-5	47	62.1	0.1
R-6	39	49.4	0.4
R-7	48	51.5	2.5
R-8	43	54.3	0.3
R-9	38	54.1	0.1
R-10	39	54.1	0.1
R-11	38	54.1	0.1

1 Calculated combined noise levels from Table 14-41.
2 Sum of calculated combined and measured ambient daytime average noise levels.
3 Calculated combined increase in ambient daytime average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-45
Ambient Plus Combined Project Noise Increases at Residential Uses – Daytime L_{max} (dB)

Residential Receiver	Highest Predicted Noise Level[1]	Ambient Plus Project[2]	Overall Increase in Ambient[3]
R-1	48	70.0	<0.1
R-2	47	70.0	<0.1
R-3	45	70.0	<0.1
R-4	58	75.1	0.1
R-5	55	75.0	<0.1
R-6	47	67.0	<0.1
R-7	57	67.4	0.4
R-8	51	71.0	<0.1
R-9	42	71.0	<0.1
R-10	43	71.0	<0.1
R-11	43	71.0	<0.1

1 Calculated combined noise levels from Table 14-42.
2 Sum of calculated combined and measured ambient daytime average noise levels.
3 Calculated combined increase in ambient daytime average noise levels.

Source: Bollard Acoustical Consultants, Inc., 2022.

The data provided in Table 14-43 through Table 14-45 indicate that the increases in ambient noise levels from combined project on-site operations would be well below the applied increase significance criterion of 5.0 dB. Because the calculated combined noise exposure from project on-site operations would satisfy applicable Placer County General Plan and Placer County Code noise level standards at the nearest existing residential uses and because the combined noise exposure would not significantly increase ambient noise levels at those uses, noise generated by all on-site operational activities at existing residences in the project vicinity would be less than significant.

Conclusion

Based on the above, the proposed project would not result in the generation of a substantial permanent increase in ambient noise levels at existing residences located within the immediate project vicinity. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

14-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the impact is *less than significant*.

As discussed above in the Existing Environmental Setting section of this chapter, pursuant to the site visit conducted on March 29, 2022 as part of the Noise Assessment, vibration levels were below the threshold of perception at all locations surrounding the project site and in the immediate project vicinity. Thus, the existing vibration environment in the

immediate project vicinity is considered negligible. The proposed project would consist of a full-production winery that would include production facilities, a tasting room, an accessory restaurant, and associated facilities. Given the large setback from the proposed facilities, and because vibration levels dissipate rapidly with distance, vibration levels from facility operations are not expected to result in the exposure of persons to excessive groundborne vibration levels at existing off-site residential uses. However, construction activities associated with the proposed project would have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Accordingly, the analysis below focuses on construction vibration only.

During on-site project construction, heavy equipment would be used for grading, excavation, paving, and building construction. Heavy equipment would also be used during construction of the proposed private driveway. Use of heavy equipment associated with such activities would generate localized vibration in the immediate vicinity of the project site.

Table 14-46 includes the range of vibration levels for equipment commonly used in general construction projects at a reference distance of 25 feet, as well as the projected equipment vibration levels at the nearest existing off-site sensitive receptor (residential receiver R-5) to the project site, which is located approximately 150 feet away (see Figure 14-2).

As shown in Table 14-46, construction vibration levels generated from the majority of construction activities within the project site at the nearest residence would be well below the Caltrans thresholds for damage to residential structures of 0.5 in/sec PPV (see Table 14-13), as well as below or within the range of barely/slightly perceptible (see Table 14-14). Therefore, on-site construction would not result in excessive groundborne vibration levels at nearby existing residences.

Table 14-46
Vibration Source Amplitudes for On-Site Construction Equipment

Equipment	Reference PPV at 25 Feet (in/sec)	Projected PPV at Nearest Residential Uses (150 Feet) (in/sec)
Vibratory Roller	0.210	0.014
Hoe Ram	0.089	0.006
Large Bulldozer	0.089	0.006
Caisson Drilling	0.089	0.006
Loaded Trucks	0.076	0.005
Jackhammer	0.035	0.002
Small Bulldozer	0.003	<0.001

Source: Bollard Acoustical Consultants, Inc., 2022.

Additionally, during the March 29, 2022 site visit, BAC noted that during the passage of trains on the nearby UPRR tracks, vibration levels within 100 feet of the tracks would be expected to be perceptible. The nearest proposed structures to the UPRR tracks have been identified as the gatehouse and the octagon building, which are located more than 375 feet from the nearest tracks. Given the setback from the railroad tracks, and because vibration levels dissipate rapidly with distance, the proposed project would not result in the exposure of persons to excessive groundborne vibration levels at proposed structures or

uses within the project site, even when considering the simultaneous passage of trains on the UPRR tracks.

Based on the above, construction and operation of the proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. As such, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. For further detail related to the cumulative setting of the proposed project, refer to Chapter 20, Statutorily Required Sections, of this EIR.

14-4 Generation of a substantial permanent increase in ambient noise levels associated with the proposed project in combination with cumulative development. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

Future development projects within the HBPCP and BRSP areas, in combination with the proposed project, would incrementally affect the future cumulative ambient noise environment. The primary project component that could combine with noise impacts from surrounding development in the project region would be associated with vehicle traffic generated by the project and other developments, which together, could potentially result in a significant cumulative impact related to transportation noise.

To assess the potential noise impacts due to the traffic increase from the proposed project on the local roadway network under Cumulative conditions, noise levels have been calculated for the Cumulative and Cumulative Plus Project conditions at a standard distance of 100 feet from the centerline of the selected roadways using the methodology described in the Method of Analysis section. The estimated noise levels are presented in Table 14-47 and Table 14-48. Blank cells indicate traffic data was not provided.

As indicated in Table 14-47 and Table 14-48, the proposed project's contribution to cumulative traffic noise level increases is predicted to exceed applicable FICON increase significance criteria along only one roadway segment (segment 29), which would be the primary access point to the project site. Specifically, the cumulative traffic noise level increase along segment 29 would range from 43.4 to 43.9 dB DNL.

Cumulative noise levels with consideration of ambient conditions would be considerably higher than Cumulative Plus Project traffic noise levels alone. Cumulative Plus Project traffic noise levels along segment 29 would be less than the estimated Cumulative noise

level of 56 dB DNL at the project site and would result in project-generated noise level increases of less than 1.0 dB. Such an increase is a more accurate representation of actual project-related noise level increases than the "traffic-only" noise increases of 43.9 and 43.4 dB DNL shown in Table 14-47 and Table 14-48, respectively. Thus, project-related increases in traffic noise levels would not substantially exceed estimated Cumulative conditions along segment 29 relative to the applicable FICON criteria. Furthermore, although residences were not identified within 100 feet from segment 29, it should be noted that the Cumulative Plus Project traffic noise levels of 43.9 and 43.4 dB DNL at a distance of 100 feet along that segment are well below the Placer County General Plan exterior noise level standard of 60 dB DNL applicable to traffic noise affecting residential uses.

Based on the above, including consideration of measured ambient noise conditions within the project site, off-site traffic noise impacts related to increases in traffic resulting from development of the proposed project (Cumulative versus Cumulative Plus Project) would be ***less than cumulatively considerable.***

Mitigation Measure(s)

None required.

Table 14-47
Traffic Noise Under Cumulative and Cumulative Plus Project Conditions – Weekday PM Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			C	C+P	Increase	
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	60.7	60.7	0.0	No
2		South	60.4	60.4	0.0	No
3		East	59.9	59.9	0.0	No
4		West	62.6	62.6	0.0	No
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	55.8	55.8	0.0	No
6		South	50.3	50.3	0.0	No
7		East	60.6	60.6	0.0	No
8		West	61.0	61.0	0.0	No
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	55.2	55.2	0.0	No
10		South	59.0	59.1	0.1	No
11		East	61.7	61.7	0.0	No
12		West	56.4	56.5	0.1	No
13	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	North	61.8	61.8	0.0	No
14		South	57.4	57.4	0.0	No
15		East	64.4	64.4	0.0	No
16		West	60.7	60.7	0.0	No
17	(5) Old State Highway/Taylor Road	North	42.3	42.3	0.0	No
18		South	59.3	59.3	0.0	No
19		East	62.8	62.8	0.0	No
20		West	57.9	57.9	0.0	No
21	(6) Taylor Road/Callison Road	North	61.7	61.8	0.1	No
22		South	61.7	61.8	0.1	No
23		East	--	--	--	--
24		West	51.2	52.7	1.5	No

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Table 14-47
Traffic Noise Under Cumulative and Cumulative Plus Project Conditions – Weekday PM Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			C	C+P	Increase	
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	43.5	43.9	0.4	No
27		East	50.0	51.8	1.8	No
28		West	50.8	52.5	1.7	No
29	**(8) Project Driveway/Callison Road**	**North**	**--**	**43.9**	**43.9**	**Yes**
30		South	--	--	--	--
31		East	51.2	52.7	1.5	No
32		West	51.2	51.3	0.1	No
33	(9) Taylor Road/English Colony/Rock Springs Road	North	62.3	62.4	0.1	No
34		South	63.0	63.1	0.1	No
35		East	54.8	54.8	0.0	No
36		West	58.8	58.8	0.0	No
37	(10) Taylor Road/Penryn Road	North	63.2	63.3	0.1	No
38		South	61.4	61.4	0.0	No
39		East	60.8	60.9	0.1	No
40		West	40.5	40.5	0.0	No
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	61.4	61.5	0.1	No
42		South	62.6	62.6	0.0	No
43		East	60.5	60.5	0.0	No
44		West	59.9	59.9	0.0	No
45	(12) Penryn Road/I-80 EB Ramps/Boulder Creek	North	62.6	62.6	0.0	No
46		South	62.0	62.0	0.0	No
47		East	47.3	47.3	0.0	No
48		West	60.8	60.8	0.0	No

Source: Bollard Acoustical Consultants, Inc., 2022.

Table 14-48
Traffic Noise Under Cumulative and Cumulative Plus Project Conditions – Saturday Noon Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			C	C+P	Increase	
1	(1) Ophir Road/Taylor Road/I-80 WB Ramps	North	60.8	60.8	0.0	No
2		South	60.4	60.4	0.0	No
3		East	59.5	59.5	0.0	No
4		West	62.9	62.9	0.0	No
5	(2) Hillview Road/SR 193/I-80 EB Ramps	North	54.0	54.0	0.0	No
6		South	49.6	49.6	0.0	No
7		East	59.6	59.6	0.0	No
8		West	59.7	59.7	0.0	No
9	(3) Old State Highway/Newcastle Road/I-80 WB Ramps	North	54.8	54 .8	0.0	No
10		South	59.8	59.8	0.0	No
11		East	61.1	61.1	0.0	No
12		West	55.2	55.3	0.1	No
13		North	61.3	61.3	0.0	No

(Continues on next page)

Table 14-48
Traffic Noise Under Cumulative and Cumulative Plus Project Conditions – Saturday Noon Peak Hour

Seg.	Intersection	Direction	Noise Levels at 100 Feet, DNL (dB)			Substantial Increase
			C	C+P	Increase	
14	(4) Newcastle Road/I-80 EB Ramps/Indian Hill Road	South	57.3	57.3	0.0	No
15		East	63.9	63.9	0.0	No
16		West	59.8	59.9	0.1	No
17	(5) Old State Highway/Taylor Road	North	41.5	41.5	0.0	No
18		South	58.1	58.1	0.0	No
19		East	61.3	61.3	0.0	No
20		West	56.9	56.9	0.0	No
21	(6) Taylor Road/Callison Road	North	60.2	60.3	0.1	No
22		South	60.1	60.2	0.1	No
23		East	--	--	--	--
24		West	50.0	51.7	1.7	No
25	(7) Sisley Road/Callison Road	North	--	--	--	--
26		South	42.2	42.7	0.5	No
27		East	49.6	51.4	1.8	No
28		West	49.1	51.2	2.1	No
29	**(8) Project Driveway/Callison Road**	**North**	**--**	**43.4**	**43.4**	**Yes**
30		South	--	--	--	--
31		East	48.5	50.8	2.3	No
32		West	48.5	48.7	0.2	No
33	(9) Taylor Road/English Colony/Rock Springs Road	North	60.7	60.8	0.1	No
34		South	62.2	62.3	0.1	No
35		East	54.2	54.2	0.0	No
36		West	57.8	57.8	0.0	No
37	(10) Taylor Road/Penryn Road	North	62.4	62.5	0.1	No
38		South	60.2	60.2	0.0	No
39		East	60.5	60.6	0.1	No
40		West	37.5	37.5	0.0	No
41	(11) Penryn Road/Boyington Road/I-80 WB Ramps	North	61.6	61.7	0.1	No
42		South	62.4	62.4	0.0	No
43		East	60.5	60.5	0.0	No
44		West	59.4	59.4	0.0	No
45	(12) Penryn Road/I-80 EB Ramps/Boulder Creek	North	62.4	62.4	0.0	No
46		South	61.3	61.3	0.0	No
47		East	47.3	47.3	0.0	No
48		West	60.0	60.0	0.0	No

Source: Bollard Acoustical Consultants, Inc., 2022.

15. Public Services and Utilities

15. PUBLIC SERVICES AND UTILITIES

15.1 INTRODUCTION

The Public Services and Utilities chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project on fire and sheriff protection services, schools, parks, recreation facilities, and other public facilities such as libraries. The chapter also evaluates the sufficiency of water supplies to meet the project's water demand and assesses the adequacy of the wastewater system, solid waste disposal, and gas, electric, and telecommunication utilities required to serve the project. Potential impacts to public services are identified if the proposed project would require the development of new facilities or expansion of existing facilities, the construction of which could have adverse physical effects on the environment. Information for the Public Services and Utilities chapter was drawn from the Placer County General Plan,[1] Placer County General Plan EIR,[2] Horseshoe Bar/Penryn Community Plan (HBPCP),[3] a Public Well Impact Evaluation prepared for the proposed project by EMKO Environmental, Inc. (EMKO) (see Appendix N),[4] a Domestic Water System Permit Application Technical Report prepared for the proposed project by Cranmer Engineering, Inc. (Cranmer) (see Appendix P),[5] and an Anticipated On-Site Sewage Flows Technical Memorandum prepared for the proposed project by BEM (see Appendix Q).[6]

15.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing public services in the area, including fire and sheriff protection services, schools, parks, and recreation facilities, as well as the existing utilities and service systems in the project area, including water supply, wastewater conveyance and treatment, solid waste, and gas, electric, and telecommunication infrastructure. The project site is located in the community of Penryn, within unincorporated Placer County.

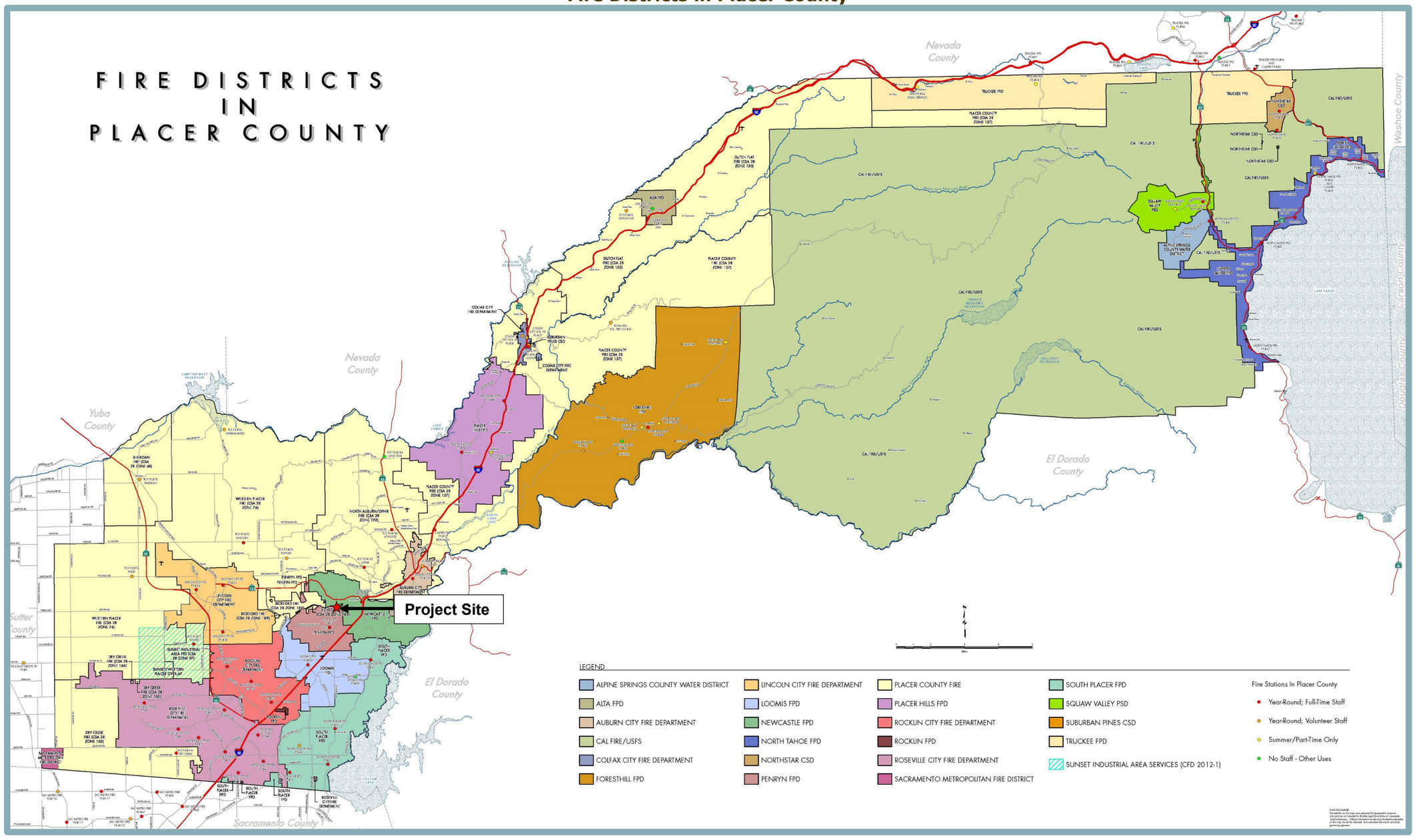
Fire Protection Services

Fire protection services would be provided to the project site by the Penryn Fire Protection District (PFPD) as well as the Newcastle Fire Protection District (NFPD) (see Figure 15-1). Specifically, the proposed Octagon Building is within the PFPD district, and the proposed Warehouse Building is within the NFPD boundaries. The PFPD covers an area of 10.5 square miles, serving approximately 1,410 homes, 118 businesses and a permanent population of nearly 6,000 people. The PFPD responds to more than 650 calls each year, made up of approximately 70 percent of calls which are medical in nature, and 30 percent of calls being primarily fire type calls. Similarly, NFPD covers 15 square miles, serves approximately 6,200 residents, and responds to approximately 700 calls for service annually.

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1 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2015).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
4 EMKO Environmental, Inc. *Public Well Impact Evaluation: Project 8 Winery.* June 25, 2022
5 Cranmer Engineering, Inc. *Mima Capital LLC. Domestic Water System Permit Application Technical Report for a proposed public water system to be located at 7615 Callison Rd and 7535 Ridgeview Ln, Penryn, CA 95663.* August 5, 2020.
6 BEM Maintenance. *Project 8 (PLN21-00198) – Anticipated On-Site Sewage Flows Technical Memorandum.* May 19, 2022.

Figure 15-1
Fire Districts in Placer County



Automatic and mutual aid agreements between PFPD, NFPD, and neighboring jurisdictions, including South Placer Fire, Newcastle Fire, Placer Hills Fire, the California Department of Forestry and Fire Protection (CAL FIRE) and the cities of Lincoln, Rocklin and Auburn, are in place to provide an increased level of protection and to ensure the most efficient service to the community. Current response times in the project area are between five and eight minutes, which is better than the State average of 12 minutes.

The PFPD is served by one station, located in the center of the town of Penryn, at 7206 Church Street, approximately 2.1 miles from the project site. The station is staffed 24 hours a day by two qualified personnel, as well as Intern Firefighters, which work alongside the paid staff on a 24-hour predetermined schedule. Among the district's paid and intern staff, members are specialized in particular areas such as: Incident Command System, Apparatus Driver Operator, Hazardous Materials, Swift Water Rescue, Advanced Rescue Systems, Fire Prevention, Plan Reviewer's, Inspector's, and Training and Safety.

The NFPD is also served by one station, located at 9211 Cypress Street, approximately 1.8 miles northeast of the project site. The current NFPD fire station has been used since 1922 and does not meet the needs of an Essential Public Service Facility. As such, the NFPD is currently in the process of building a new station located along Old State Highway in Newcastle to relocate the NFPD. The NFPD is governed by a five-member Board of Directors which is elected by voters of the District. The Fire Chief (currently shared with Placer Hills Fire Protection District) oversees six full time employees and three to four active volunteer firefighters. The NFPD is an all-risk department that provides response to all types of fires, medical emergencies, rescues, and hazardous material incidents. Additional services include a year-round fire prevention program incorporating building occupancy inspections, new building plan reviews and a risk reduction and Public Education delivery model.

PFPD and NFPD collect development impact fees on new construction within the districts, which goes towards the districts' Mitigation Fund, used to purchase capital equipment. Currently, the PFPD's Fire Facilities Fee is $1.33 per square foot of retail/commercial development, and NFPD's Fire Facilities Fee is $1.21 per square foot of retail/commercial development.

Sheriff Protection Services

The Placer County Sheriff's Office (PCSO) provides law enforcement services to the unincorporated areas of Placer County, including the areas in the vicinity of the proposed project site. In addition, The California Highway Patrol provides traffic enforcement and accident investigations along the Interstate 80 (I-80) corridor to the east of the project site.

The Auburn Justice Center (AJC), located at 2929 Richardson Drive, is the main office for the PCSO's operations and is located approximately nine miles northeast of the project site. According to the Placer County General Plan, the PCSO is organized into five divisions: patrol services, investigations/coroner, corrections, marshal, and a Tahoe sub-station. Patrol and investigation services operate in the Dewitt Center and various substations in Loomis, Foresthill, and near Lake Tahoe.

The project site would be primarily served by the South Placer Substation located in Loomis at the intersection of Horseshoe Bar Road and I-80, approximately 5.3 miles to the southwest of the site. Staffing of the substation includes 36 patrol positions, three detectives, four patrol sergeants, community services/school safety sergeant, five high school resource officers, two elementary



school resource officers, one field community services officer, three community services officers, and numerous volunteers and other professional staff.[7]

Policies 4.H.1 and 4.H.2 of the Placer County General Plan call for a staffing ratio of one officer per 1,000 residents in unincorporated areas and a response time for emergency calls of eight minutes in suburban areas. According to the Placer County Sheriff's Office 2020 Annual Report, the Dispatch Services Unit handled a total of over 200,000 calls for service in 2020, with just over 48,000 being 911 calls.[8]

Schools, Parks, and Recreation Facilities

Given that the proposed project would consist of a full-production winery, impacts regarding schools, parks, and recreation facilities would not be expected. As a result, detailed existing setting information has not been provided in this section for schools, parks, and recreation facilities in the project area. Nevertheless, an impact statement has been included in this chapter to provide justification as to why the proposed project would not result in impacts to these services.

Water Infrastructure

An existing on-site public well (Public Well 20-2), constructed in accordance with the requirements of the Placer County Environmental Health Division and the State Water Resources Control Board (SWRCB), would be used for potable water. Public Well 20-2 was permitted by Placer County as a transient non-community water system under Public Water System (PWS) #3107351 (Well Permit #9437). Public Well 20-2 is equipped with several appurtenances including a downturned and screened well vent, non-threaded sample tap, check valve, and totalizing flowmeter. In addition, the well is required to include a water storage tank capable of holding the maximum day demand (MDD) volume of the well. All components of the water system are required to comply with American Water Works Association (AWWA) standards.

Drawdown and water quality testing has been completed on Public Well 20-2 and reporting shows compliance with all requirements. Irrigation water is provided on-site from Placer County Water Agency (PCWA) from the Antelope Canal, which traverses the property. In addition, two existing, non-public wells are located on-site, which produce a total of 90 gallons per minute (gpm) and could be used to replace the supply from the irrigation canal in the event the canal supply is ever temporarily interrupted.

Table 12-2 in Chapter 12, Hydrology and Water Quality, of this EIR provides a summary of the well completion reports (WCRs) for wells within the project vicinity reviewed for the analysis included therein. In addition, Figure 12-3 shows the approximate locations of the project wells and adjacent private domestic wells.

Public Well 20-2 is 120 feet deep and produces groundwater from the interval between 60 feet below the ground surface (bgs) and 120 feet bgs.[9] At the time Public Well 20-2 was drilled, the well was able to produce up to 60 gallons per minute (gpm). However, the pump that is currently installed in the well has a maximum capacity of 25 gpm.

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7 Placer County Sheriff's Department. *Loomis Office*. Available at: https://www.placer.ca.gov/2271/Loomis-Office. Accessed June 2022.
8 Placer County Sheriff's Department. *Placer County's Sheriff's Office 2020 Annual Report.* 2020.
9 EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery.* June 25, 2022.

Wastewater Infrastructure

Sewer services in unincorporated Placer County are typically provided by the Placer County Department of Public Works, Environmental Engineering and Utilities Division. However, for many rural parts of the County, access to public sewer is not available. Therefore, for areas not connected to the existing sewer pipeline system, private septic systems are used. Septic systems generally consist of an underground septic tank and associated leach field. Such septic systems are subject to Placer County permitting requirements, and maintenance of each septic system is the sole responsibility of the property owner. Ongoing use of the septic systems, as well as any alterations to the septic systems, is subject to the rules and regulations of the Placer County Environmental Health Division.

Sanitary sewer infrastructure does not currently exist within the project site. As part of the proposed project, an on-site septic system that would be compliant with State and County requirements would be constructed. A septic permit would be obtained from the Placer County Environmental Health Division prior to building permit issuance to allow for the development of the on-site septic system.

Solid Waste

Solid waste collection services in the project area are provided by Recology Auburn Placer, under contract with Placer County. Recology provides curbside collection of mixed waste (garbage and recyclables), green waste, and some universal and household hazardous wastes by appointment. The mixed waste collected by Recology is delivered to the Western Placer Waste Management Authority (WPWMA) Materials Recovery Facility (MRF), where waste is processed, recyclables are recovered, and residuals are disposed. The MRF is located near SR 65, between Roseville and Lincoln, at the corner of Athens Avenue and Fiddyment Road. Recovered materials from the MRF are sold throughout the world, helping to conserve natural resources. Non-recyclable materials are sent to the Western Regional Sanitary Landfill (WRSL) for disposal, which is co-located at the MRF site. The current space available, together with recovery efforts by the MRF, will delay the WRSL from reaching capacity.[10]

The WPWMA is a regional agency established in 1978 through a Joint Exercise of Powers Agreement between the County of Placer and the cities of Roseville, Rocklin, and Lincoln to acquire, own, operate, and maintain a sanitary landfill site and all related improvements.

The WPWMA designed and built the MRF to divert recyclable materials from being disposed at the landfill. The MRF also processes source separated wood waste and green waste and accepts separated recyclables, including electronics and other universal wastes (e.g., batteries and fluorescent lamps), at the recycling drop-off and buy-back center. The compost portion of the MRF has an annual processing capacity of 82,000 tons (averaged over the year and does not account for seasonal peaks). The MRF is permitted to have up to 75,000 cubic yards (approximately 37,500 tons) of compost material at the facility at any one time.

Residual waste from the MRF is transported to the WRSL. The WPWMA owns and oversees all operations on-site – the WRSL, MRF, compost facility, and Permanent Household Hazardous Waste Collection Facility (PHHWCF). A private firm, under contract with WPWMA, manages the day-to-day operation of the facilities. The landfill is specified as a Class II/Class III non-hazardous

[10] Western Placer Waste Management Authority. *About WPWMA*. Available at: https://www.wpwma.ca.gov/about-wpwma/. Accessed July 2022.

site. Hazardous waste from households and Conditionally Exempt Small Quantity Generators is accepted at the PHHWCF.

Permit Limits and Site Constraints

The 291-acre WRSL is permitted to accept 1,900 tons per day and 624 vehicles per day, and receives an average of approximately 1,077 tons per weekday.[11] The WRSL has a permitted design capacity of 36,350,000 cubic yards and, as of December 2021 has a remaining capacity of 22,690,011 cubic yards. Under current land use and development conditions, the WRSL has a permitted lifespan extending to 2058.[12]

The MRF has a permitted processing limit of 1,750 tons per day.[13] According to the WPWMA, for 2021, the average weekday tonnage received at the MRF was 885 tons.[14] The MRF expanded in 2007, increasing its processing capacity of municipal solid waste and construction and demolition debris to 2,200 tons per day.[15]

Gas, Electric, and Telecommunication Infrastructure

Electric services in the project area are provided by PG&E. PG&E is one of the largest providers of electricity throughout Placer County. PG&E is a San Francisco based, private company, publicly regulated by the California Public Utilities Commission and provides electricity to the majority of Northern California. PG&E has ample resources to meet a wide range of projected growth; however, when the time comes, additional improvements to the facilities may be required to meet future growth demands. Existing electrical and telecommunication distribution lines are located along Callison Road in the project vicinity, and also traverse the eastern portion of the project site. The proposed project would not include a natural gas connection; rather, propane would be stored on-site in three, 1,500-gallon tanks (discussed further in Impact 15-5).

15.3 REGULATORY CONTEXT

The following discussion contains a summary of regulatory controls pertaining to public services and utilities, including State and local laws and ordinances.

Federal Regulations

The federal environmental laws and policies relevant to public services and utilities are primarily related to water quality, which is addressed in Chapter 12, Hydrology and Water Quality, of this EIR.

State Regulations

The following are applicable State regulations related to the proposed project.

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11 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. 2022.
12 *Ibid.*
13 California Department of Resources Recycling and Recovery (CalRecycle). *Western Placer Waste Mgmt Authority MRF (31-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2537?siteID=2269. Accessed July 2022.
14 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. 2022.
15 *Ibid.*

Uniform Fire Code

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code (CFC) include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 15000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Green Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building Standards Commission (BSC). The 2019 California Green Building Standards Code (CALGreen 2019) standards, which are the current standards, improved upon the 2016 CALGreen standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' (DWR's) Model Water Efficient Landscape Ordinance (WELO);
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle (EV) charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs. Placer County does not require compliance with Tier 1 or Tier 2 CALGreen standards at this time. The CALGreen 2022 standards, which improve upon the 2019 CALGreen standards, will go into effect on January 1, 2023.

Assembly Bill 1327

Assembly Bill (AB) 1327, the Solid Waste Reuse and Recycling Access Act of 1991 requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials. Placer County adopted such an ordinance (Placer County Code Section 8.16.080).

Assembly Bill 1881

AB 1881, the Water Conservation in Landscaping Act of 2006 required the DWR to update the Model Efficient Landscape Ordinance. Furthermore, AB 1881 required local agencies to adopt the updated model ordinance or an equivalent ordinance by January 1, 2010. If local jurisdictions failed to adopt the updated model ordinance or an equivalent by January 1, 2010, the DWR's updated model ordinance would automatically be adopted by statute. Placer County adopted its WELO in October 2017.

Senate Bill 1016

Enacted in 2007, Senate Bill (SB) 1016 amended portions of the California Integrated Waste Management Act, allowing the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

California Integrated Waste Management Act – Assembly Bill 939

AB 939, the California Integrated Waste Management Act of 1989 contains requirements affecting solid waste disposal in California. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to $10,000-per-day fines.

California Code of Regulations, Title 22, Section 64560

California Code of Regulations (CCR), Title 22, Section 64560 provides State requirements for new well siting, construction, and permit applications. According to CCR Title 22, Section 64560, to receive a new or amended domestic water supply permit for a proposed well, the water system is required to provide a source water assessment, documentation demonstrating that a well site control zone with a 50-foot radius around the site can be established, design plans and specifications for the well, and documented CEQA compliance, to the SWRCB in the technical report as part of the permit application. After the SWRCB has provided written or oral approval of the initial permit amendment application and the water system has constructed the well, the water system is required to submit a copy of the well construction permit if required by the County or local agency; a DWR well completion report; a copy of any pump tests required by the SWRCB; results of all required water quality analyses; and as-built plans.

CCR Title 22, Section 64560 also requires that each new public water supply well, at a minimum, be constructed in accordance with the community water system well requirements in California DWR Bulletins 74-81 and 74-90; be constructed in accordance with AWWA Standard A100-06; and be installed such that all components prescribed in Section 64560(c)(3(A) through Section 64560(c)(3)(F) of CCR Title 22 are included.

Local Regulations

The following are applicable local regulations related to the proposed project.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to public services and utilities are applicable to the proposed project.

General Public Facilities and Services

Goal 4.A To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

Policy 4.A.1 Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction. The County shall require dedication of land within newly developing areas for public facilities, where necessary.

Policy 4.A.2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and
b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.
c. The facilities improvements are designed and built to the current standards of the agency providing service.

Policy 4.A.3 The County shall require that new urban development is planned and developed according to urban facility standards.

Public Facilities and Services Funding

Goal 4.B To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.

Policy 4.B.1 The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when

alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.2 The County shall require that new development pay the cost of upgrading existing public facilities or construction of new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.3 The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.

Policy 4.B.6 The County shall require the preparation of a fiscal impact analysis for all major land development projects. The analysis will examine the fiscal impacts on the County and other service providers which result from large-scale development. A major project is a residential project with 100 or more dwelling units or a commercial, professional office or industrial development on 10 or more acres of land.

Water Supply and Delivery

Goal 4.C To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

Policy 4.C.1 The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

Policy 4.C.2 The County shall approve new development based on the following guidelines for water supply:

a. Urban and suburban development should rely on public water systems using surface supply.
b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.
c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Policy 4.C.6 The County shall promote efficient water use and reduced water demand by:

a. Requiring water-conserving design and equipment in new construction;
b. Encouraging water-conserving landscaping and other conservation measures;
c. Encouraging retrofitting existing development with water-conserving devices; and,
d. Encouraging water-conserving agricultural irrigation practices.

Sewage Conveyance and Treatment

Goal 4.D The County shall require wastewater conveyance and treatment facilities that are sufficient to serve the Placer County General Plan proposed density of residential, commercial, and public/institutional uses in a way which protects the public and environment from adverse water quality or health impacts.

Policy 4.D.2 The County shall require developments outside of an existing sewer service area and needing new connections to public conveyance and treatment facilities to be annexed into the sewer service area providing service.

Policy 4.D.4 The County shall require developments needing new connections to construct wastewater conveyance facilities which are sized and located to provide sewer service based on permitted densities and applicable sewer shed area. Wastewater conveyance systems shall be designed for gravity flow. Where gravity conveyance systems are not feasible, the agency providing service may approve pumping service where a site specific engineering analysis demonstrates the long-term cost effectiveness of pumped facilities.

Policy 4.D.5 The County shall require developments needing new connections to pay their fair share of the cost for future public wastewater facilities which support development based on the Placer County General Plan. The fair share

will be based on the demand for these facilities attributable to the new development.

Policy 4.D.6 The County shall promote efficient water use and reduced wastewater system demand by:

a. Requiring water-conserving design and equipment in new construction as required in California law (AB 1881);
b. Encouraging retrofitting with water-conserving devices; and
c. Designing wastewater systems to minimize inflow and infiltration.

Policy 4.D.9 The County shall promote functional consolidation of wastewater facilities.

Policy 4.D.10 The County shall require all public wastewater facilities to be designed and built to the current standards of the agency providing service.

Solid Waste Disposal and Recycling

Goal 4.G To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

Policy 4.G.1 The County shall require all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.

Policy 4.G.2 The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

Policy 4.G.6 The County shall ensure that landfills and transfer stations are buffered from incompatible development.

Policy 4.G.7 The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.

Law Enforcement Services

Goal 4.H To provide adequate law enforcement services to deter crime and to meet the growing demand for services associated with increasing population and commercial/industrial development in the County.

Policy 4.H.1 Within the County's overall budgetary constraints, the County shall strive to maintain the following staffing ratios (expressed as the ratio of officers to population):

a. 1:1,000 for unincorporated areas
b. 1:7 for jail population
c. 1:16,000 total county population for court and civil officers

Policy 4.H.2 The County Sheriff shall strive to maintain the following average response times for emergency calls for service:

a. 6 minutes in urban areas
b. 8 minutes in suburban areas
c. 15 minutes in rural areas
d. 20 minutes in remote areas

Policy 4.H.4 The County shall require new development to develop or fund sheriff facilities that, at a minimum, maintain the above standards.

Fire Protection Services

Goal 4.I To protect residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires.

Policy 4.I.1 The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as Insurance Service Organization (ISO) ratings):

a. ISO 4 in urban areas
b. ISO 6 in suburban areas
c. ISO 8 in rural areas

Policy 4.I.2 The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):

a. 4 minutes in urban areas
b. 6 minutes in suburban areas
c. 10 minutes in rural areas

Policy 4.I.3 The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

Policy 4.I.9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP related to public services and utilities are applicable to the proposed project.

Community Development Element: Public Facilities and Services

Goal 1 — Ensure that public services and facilities are available to serve the needs created by the present and future development which occurs in the plan area.

Goal 3 — Avoid inappropriate growth-inducing impacts which can result from premature public service facility construction.

Goal 5 — Ensure that the rate of development shall not exceed the capacity of county, community, special districts (including school districts), and utility companies to provide all needed public services in a timely, orderly, and economically feasible manner.

- Policy 1 — Coordinate with City, County, special districts, public works and land use planning staff regarding the timely provision of public facilities and services. Discourage overdevelopment of facilities, services, and systems in advance of demand to ensure that no inequitable financial burden is imposed, and to prevent the commitment of land use through premature public facility construction.
- Policy 2 — Ensure that adequate services will be available for proposed development before granting approvals.
- Policy 5 — As new development is proposed, consider adopting mitigation measures to reduce impacts on local services (i.e., schools, parks, fire, police, general government services, etc.).
- Policy 6 — Ensure that both public and private water supplies are safe and adequate for the intended use.

Community Development Element: Sewage Disposal

- Policy 1 — Assure that sewage disposal facilities physically meet the demands of the developing community's density while also protecting the public health and water quality from adverse effects.
- Policy 2 — Allow on-site sewage disposal systems in only rural areas where the parcel sizes and population density assure that adverse effects upon health and environmental quality do not occur.

Community Development Element: Water Supply

Policy 1	Encourage, through allowable densities and distribution of land uses, the maximum feasible usage of treated surface water supplies rather than groundwater supplies as a basis for land development.
Policy 3	Encourage elimination of existing individual residential canal water supplies and their replacement with safe water sources.

Community Development Element: Fire Protection

Policy 2	Control fire losses and fire protection costs through continued emphasis upon automatic fire detection, control and suppression systems. For development on mesas, ridgelines, and hilltops, appropriate setbacks from slopes are a preferred mitigation measure for fire hazards.
Policy 5	Establish a program whereby new development pays the cost of new capital improvements necessary to provide the fire district with new fire stations, equipment and apparatus necessary to achieve the desired level of service for new development in the Plan area.
Policy 6	Maintain strict enforcement of the County Zoning and Subdivision Ordinances, Uniform Building Code and the Uniform Fire Code.
Policy 7	Ensure that all new developments comply with the California Department of Forestry fire safe regulations, County development standards, and other local fire agency standards regarding the adequate provision of water supply and emergency vehicle accessibility.

Community Development Element: Law Enforcement

Policy 1	Identify a means by which new development in the area can be charged with the increasing criminal justice services costs which they generate.
Policy 2	Attempt to reduce response time and increase service levels through circulation system improvements.
Policy 3	Seek to maintain Sheriff's Department staff levels at an acceptable level as determined by the Board of Supervisors and County Executive Officer.
Policy 4	Consider public safety issues in all aspects of commercial, industrial and residential project design.

Community Development Element: Flood Control and Storm Drainage

Policy 4	Reduce the negative impacts on water quality resulting from urban runoff for all commercial, industrial, and residential projects by treating such runoff through application of "Best Management Practices" before it enters intermittent or permanent streams. All feasible mitigation measures should be considered including, but not limited to, artificial wetlands, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, or other effective means, where appropriate.
Policy 9	Consider recreational opportunities and aesthetics in the design of storm water ponds and conveyance facilities.
Policy 12	Ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Storm Water Management Manual and the County Land Development Manual.

Community Design Element

Policy 18	Utility lines should be installed underground (particularly in scenic corridors) to minimize adverse effects on the existing scenic values in the area. Care should be taken during installation to disturb a minimum of natural vegetation.

Placer County Code

Sections from the Placer County Code related to fire protection services and winery standards, as they relate to water use and wastewater discharge, are discussed below.

Development Fees for Fire Protection

Article 15.36, Development Fees for Fire Protection, of the Placer County Code requires new development within the unincorporated areas of the County to pay a development fee to the relevant fire protection agency for the benefit of the owners or residents of the development. The responsibility for compliance with the requirements of Government Code Section 66000 et seq., and for the collection, receipting, and management of fees collected from new development projects shall rest with the serving fire protection agency.

Placer County Winery and Farm Brewery Ordinance

Section 17.56.330 of the Placer County Code contains the County's Winery and Farm Brewery Ordinance, which was adopted in 2020. Among other regulations, the Winery and Farm Brewery Ordinance contains specific standards related to waste discharge at wineries. Pursuant to Section 17.56.330(E)(7)(d), if public sanitary sewer is not available, on-site sewage disposal systems at wineries must be designed in compliance with Chapter 8.24 of the Placer County Code and sized to accommodate employee, tasting room, and commercial sewage flows. Portable toilets may be approved by the County Environmental Health Division for temporary and promotional events.

Placer County Water Efficient Landscape Ordinance

The Placer County Landscape Design Guidelines incorporate the County's WELO. The County's WELO established water efficiency requirements for developments throughout the County based

on the amount of landscaped areas included in proposed development projects, and whether the project involves new development or renovation type activities. Water use efficiency in the WELO is to be achieved through the use of drought tolerant plantings, and proper landscaping, as well as specific requirements for irrigation systems. The specific requirements for water use efficiency in landscaping would be confirmed during design reviews for proposed projects. Specifically, the WELO requires applications to include Landscape Packages, which would present water budgets, soil management reports, grading plans, landscape design plans, irrigation plans and other information related to the overall design of landscaping within projects.

15.4 IMPACTS AND MITIGATION MEASURES

The section below describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential project-specific impacts related to public services and utilities. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, determination of significant impacts is based on whether the proposed project would result in the following:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection;
    - Police protection;
    - Schools;
    - Parks;
    - Other public facilities;
    - Maintenance of public facilities, including roads;
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;
- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

- Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Impacts related to groundwater and storm drainage facilities are addressed in Chapter 12, Hydrology and Water Quality, of this EIR.

Method of Analysis

In order to determine the potential for the project to result in substantial adverse impacts associated with the provision of new or altered government facilities, relevant public services and utilities planning documents were reviewed, including, but not limited to, the Placer County General Plan, the Placer County General Plan EIR, and the HBPCP. In addition, a Public Well Impact Evaluation (Appendix N), a Domestic Water System Permit Application Technical Report (Appendix P), and an Anticipated On-Site Sewage Flows Technical Memorandum (Appendix Q) were prepared to assess project-specific impacts related to the proposed water supply and wastewater services that would be provided to the project. The methods of analysis used in the Public Well Impact Evaluation are described in Chapter 12, Hydrology and Water Quality, of this EIR. The methods of analysis used in the Domestic Water System Permit Application Technical Report and Anticipated On-Site Sewage Flows Technical Memorandum are generally described in further detail below.

Domestic Water System Permit Application Technical Report

The purpose of the Domestic Water System Permit Application Technical Report prepared for the proposed project was to determine domestic and fire flow requirements for the proposed project. In order to determine the size of onsite/offsite pipelines, and storage needed for the winery's domestic water use, the MDD and Peak Hour Demand (PHD) were calculated based on assumed population of employees, and visitors of the facility. The results of the calculations were:

- MDD = 7,176 gallons per day (gpd) or 4.98 gpm
- PHD = 448 gph or 7.47 gpm

The MDD and PHD did not account for any allowance for fire flow demands or irrigation demands. However, irrigation demands are provided by a separate water system connected to and using PCWA non-potable ditch water, as well as existing on-site non-public domestic wells. In addition, fire flow demand alternates of zero, 500, and 1,500 gpm were used in in the 20-year evaluation of the proposed water system's capacity.

Anticipated On-Site Sewage Flows Technical Memorandum

Anticipated on-site sewage flows were provided in the Anticipated On-Site Sewage Flows Technical Memorandum prepared for the proposed project by BEM. BEM estimated on-site sewage flows based on an assumed population of employees and visitors of the facility using the Placer County On-Site Sewage Manual. Table 15-1 presents a summary of the anticipated on-site sewage flows.

In addition, a Septic Feasibility Report was prepared for the proposed project by Lindbloom Septic Design, Inc. (Lindbloom)[16] (see Appendix C of the Anticipated On-Site Sewage Flows Technical Memorandum, included as Appendix Q to this EIR). The Septic Feasibility Report evaluated the

[16] Lindbloom Septic Design, Inc. *Septic Feasibility Report.* March 21, 2022.

ability of the proposed on-site septic system to accommodate the wastewater generated by operations of the proposed project.

Table 15-1
Anticipated On-Site Sewage Flows

Source of Flow	Design Flow[1] (gpd)	Quantity	Subtotal
Accessory Restaurant	50 (per seat)	32	1,600
Wine Tasting	5 (per person)	50	250
Event Hosting	5 (per person)[2]	200[3]	1,000
Employees	15 (per person)	15	225
Caretaker's Residence	150 (per bedroom)	3	450
		Total Anticipated Sewage Flow (gpd):	**3,525**

1 Design flows pursuant to Placer County LAMP On-Site Sewage Manual.
2 5 gpd/person used according to direction from Placer County.
3 Maximum Special Event attendees used as worst-case scenario as Special Events and Ag Promo events are not likely to occur on the same day.

Source: BEM Maintenance, May 2022.

The Septic Feasibility Report analyzed two locations within the project site to evaluate the feasibility of an on-site sewage disposal system – the West area or zone, and the East area or zone. The West zone is located below the Antelope Canal and at a lower elevation than that of the wine cave floor and the lower warehouse/processing building. The East zone is located downslope of the top of the property and at an elevation beneath that of the proposed tasting room building and upper processing area. Calculations for the West zone included the following:

- Average percolation rate: 52 minutes per inch (mpi);
- Application rate for 52 mpi: 0.69 gallons per square foot per day (gal/sf/day);
- Total lineal footage of leachtrench available in West zone: 2,350 linear feet;
- Total square footage of leachtrench available in West zone: 7,050 sf;
- Maximum gallons per day West zone can dispose of: 4,864 gallons per day (gal/day); and
- Recommended gal/day West zone can dispose of: 4,134 gal/day.

Calculations for the East zone included the following:

- Average percolation rate: 37 mpi;
- Application rate for 37 mpi: 0.82 gal/sf/day;
- Total lineal footage of leachtrench available in East zone: 2,696 linear feet;
- Total square footage of leachtrench available in East zone: 5,392 sf; and
- Gal/day East zone can dispose of: 4,421 gal/day.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

15-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services

and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Based on the analysis below, the impact is *less than significant*.

The project site is located within both the PFPD and the NFPD. Specifically, the proposed Octagon Building is within the PFPD district, and the proposed Warehouse Building is within the NFPD boundaries. As such, fire protection services for the project site would be provided by PFPD by way of its station, located in the center of the town of Penryn, at 7206 Church Street, approximately 2.1 miles from the project site, as well as by NFPD, by way of its station, located at 9211 Cypress Street, approximately 1.8 miles northeast of the site. However, it should be noted that according to the PFPD, due to the location of the development within the project site, the PFPD would be the first to respond to on-site fires. Although implementation of the proposed project would increase the number of structures protected by the PFPD and NFPD, a will-serve letter has been provided to the County, confirming that the PFPD and NFPD would provide fire protection services to the project. In addition, Placer Hills Fire Protection District (PHFPD), through a mutual aid agreement with PFPD and NFPD, would assist in providing fire protection services to the project site, if needed.[17]

As previously mentioned, additional automatic and mutual aid agreements between PFPD, NFPD, and neighboring jurisdictions, including South Placer Fire, CAL FIRE, and the cities of Lincoln, Rocklin and Auburn, are in place to provide an increased level of protection and to ensure the most efficient service to the community. Timing and triggers for public service improvements occur when impacts associated with additional development exceeds established safety standards, which is not the case for the proposed project. As the project is constructed and fire impact fees are collected, projects are required to pay their fair share towards existing and planned fire protection improvements, which will mitigate the project's impacts to fire services for all safety providers and increase the PFPD's and NFPD's ability to serve the area.

PFPD and NFPD collect development impact fees on new construction within the districts, which goes towards the districts' Mitigation Fund, use to purchase capital equipment. Currently, the PFPD's Fire Facilities Fee is $1.33 per square foot of retail/commercial development, and NFPD's Fire Facilities Fee is $1.21 per square foot of retail/commercial development. Final improvement plans for the proposed project would be subject to review by the PFPD and NFPD as part of the County's approval process in order to ensure compliance with fire and safety standards.

Although implementation of the proposed project would increase the amount of building space within the project site, all structures included in the proposed project would be constructed consistent with the CBC and CFC. In compliance with the CBC, the design of the buildings would include the installation and use of automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to CFC requirements. Such features would reduce the potential for fires to occur within the proposed structures, which would reduce the demand for fire protection services from the project site.

[17] Placer Hills-Newcastle-Penryn Fire Protection Districts. *Will Serve Letter*. May 16, 2022.

The PFPD does not have an adopted response time goal. As discussed above, due to the location of the development within the project site, the PFPD would be the first to respond to on-site fires. Given the proximity of the project site to the PFPD station, the response time to the project site would be approximately four to five minutes, which is within the response time goals established by General Plan Policy 4.I.2. As such, response times for the proposed project would be consistent with General Plan Policy 4.I.2. Moreover, PFPD and NFPD have confirmed that a new station or alteration of the existing station would not be necessary in order to adequately serve the proposed project.[18] It should be noted that due to the height of the Octagon Building (75 feet above the finished grade plus mechanical equipment), special equipment (i.e., a ladder truck) may be required if a fire were to occur within the building. However, according to the PFPD, South Placer Fire owns a ladder truck that could be used for fire response at the project site given the mutual aid agreement between PFPD and South Placer Fire.[19] Response times for the South Placer Fire ladder truck would be approximately eight minutes. In addition, the Rocklin Fire Department and Roseville Fire Department own ladder trucks that could be used at the project site; however, response times would be longer, as the districts are located further away.

Given that the proposed project would not increase population such that PFPD or NFPD would require new or altered facilities, the proposed project would not result in a need for new, or improvements to existing, fire protection facilities, construction of which could cause significant environmental impacts. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services. Based on the analysis below, the impact is *less than significant*.

The proposed project is located within the jurisdiction of and would be provided services by the PCSO. As described above, the proposed project would be primarily served by the South Placer Substation located in Loomis at the intersection of Horseshoe Bar Road and I-80, approximately 5.3 miles to the southwest of the project site.

The threshold for this impact, as identified in Appendix G of the CEQA Guidelines, is related to whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or performance objectives.

[18] D'Ambrogi, Mark, Fire Marshal, Placer Hills/Newcastle/Penryn Fire Districts. Personal communication [phone] with and Nick Pappani, Vice President, Raney Planning & Management, Inc. August 4, 2022.

[19] *Ibid.*

Access to the project site would be provided by a gated entry which would be operated by a gate house. The gate house is proposed to be developed adjacent to the gates at the main entrance from Callison Road, and would house controls for the gates and exterior lighting for the entrance and lower roadway. The gate house would be controlled primarily by a virtual attendant; however, non-virtual occupancy would occasionally occur. As such, the proposed project would include built-in security to the site, which is anticipated to reduce law enforcement demands associated with the proposed project.

In addition, though response times are dependent upon the location of patrol officers at the time of the emergency call, on average, response times to the project site would be anticipated to be within the Placer County General Plan's eight-minute response time standard for suburban areas. As a result, the proposed project would not result in a need for new, or improvements to existing, sheriff protection facilities, construction of which could cause significant environmental impacts, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for schools, parks, or other government services; or result in an increase in 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below, the impact is *less than significant*.

As discussed previously, development of the proposed project would result in development of a winery, which would not add additional residents to the area. As such, the proposed project would not directly increase the student population within the project area. While approximately 12 employment opportunities would be provided by the proposed project during normal operations, the employment opportunities would be expected to be filled by existing residents of the area in order to support the local community and provide opportunities for residents to reside and work in the same community. Thus, it is not expected that employees with children would relocate to the area as a result of the proposed project. Therefore, the proposed project would result in little to no impacts regarding schools in the area. In addition, the proposed project would pay the required Loomis Union School District impact fees, which is $0.40 per square foot for commercial development.[20] Furthermore, the project applicant would be required to

[20] Loomis Union School District. *Developer Fees.* Available at: https://www.loomis-usd.k12.ca.us/apps/pages/index.jsp?uREC_ID=73829&type=d&pREC_ID=2231941. Accessed July 2022.

pay a Capital Facilities Fee to the County prior to issuance of building permits on a per square-foot basis. Capital Facilities Fees are used to construct or expand a range of facilities, including jails, office space, libraries, health labs, and clinics.[21] A list of the specific facilities to be constructed is included in the County's Multi-Year Capital Plan. It should also be noted that while the Placer County Code requires park dedication for proposed residential subdivisions, because the proposed project is not residential in nature, park dedication requirements are not applicable to the proposed project. As a result, impacts to schools, parks, or other government services, such as libraries, would be ***less than significant***.

Mitigation Measure(s)

None required.

15-4 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Based on the analysis below, the impact is *less than significant*.

The following section describes the proposed project's potential adverse physical effects associated with maintenance and construction of County roads.

The proposed project would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities, including a private internal road network that would connect to a public road (Callison Road). Additionally, the proposed project would include improvements to Callison Road along the project frontage to provide a 32-foot-wide paved road section pursuant to County requirements. The portion of Callison Road directly in front of the main entrance to the project site would be raised approximately three feet to achieve the County's required sight distance. All roadway improvements included in the proposed project would be funded by the project applicant. In addition, the project applicant would be required by the County to pay a Traffic Impact Fee. The Traffic Impact Fee, along with other Development Impact Fees levied by the County, is intended to fund and sustain necessary improvements resulting from new development, such as road widening, signalization of intersections, and bridge replacements.

While project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible. Currently, the County uses gasoline tax and federal and State funding for transportation infrastructure maintenance, which would minimize any adverse physical impacts associated with maintenance of existing County roads. In addition, payment of Traffic Impact Fees by the

[21] Placer County. *Memorandum, Office of the County Executive, FY 2014-15 Capital Facilities Impact Fee Annual Report.* September 15, 2015.

applicant prior to the issuance of building permits would minimize any adverse physical impacts associated with construction of new County road facilities.

Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-5 Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Based on the analysis below, the impact is *less than significant*.

The following sections describe the water, wastewater treatment, stormwater drainage, electric power, propane, and telecommunications facilities improvements that would be necessary to serve the proposed project.

Water Supply Infrastructure

Water supply infrastructure already exists on-site to serve the proposed project. As discussed above, potable water would be provided to the project site by an existing on-site public well (Public Well 20-2), constructed in accordance with State and County requirements. Irrigation water is currently provided on-site by PCWA from the Antelope Canal, which traverses the property. In addition, two existing, non-public wells are located on-site, which produce a total of 90 gpm and could be used to replace the supply from the irrigation canal in the event the canal supply is ever temporarily interrupted. However, the analysis included in this EIR is not required to evaluate the effects of the existing vineyard's crop production and harvesting operations. As such, irrigation water use associated with the existing vineyards is not discussed further. Rather, the following discussion focuses on potable water supply for the proposed winery project.

Public Well 20-2 is 120 feet deep and produces groundwater from the interval from 60 feet bgs to 120 feet bgs.[22] At the time the well was drilled, the well was able to produce up to 60 gpm. However, the pump that is currently installed in the well has a maximum capacity of 25 gpm. As discussed above, the MDD and PHD were calculated based on projected numbers of visitors and employees for different project components (e.g., tasing room, restaurant) and for special events and agricultural promotional events, following state standards. The MDD is equivalent to pumping at 4.98 gpm for 24 hours while the PHD is equivalent to pumping at 7.47 gpm for 60 minutes. The MDD is calculated as 1.5 times the average daily demand. Therefore, the average water demand for typical use (i.e., 353

[22] EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery.* June 25, 2022.

days per year) is 3.32 gpm, which is below the maximum capacity of 25 gpm for the pump that is currently installed in the well.

In addition, according to the 20-year evaluation of the proposed water system's supply capacity included in the Domestic Water System Permit Application Technical Report prepared for the proposed project, based on other small privately owned water systems in Placer County (e.g., Wise Villa Winery, Turkey Creek Golf Club, Gold Hill Mobile Home Park), groundwater wells in the area are capable of producing the amount of water necessary to meet the proposed project's MDD. Moreover, the proposed water system is a transient, non-community system and can put operations on hold should the water supply fall below acceptable levels to maintain full operations. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.

Fire flow for the proposed project would be provided by the agricultural water system that is already in place for the adjacent vineyards, or by installing an underground water storage tank within the landscape area in front of the proposed warehouse building.

Wastewater Infrastructure

Sanitary sewer service would be processed by an on-site septic system that would be compliant with State and County requirements. Two options are being considered for the septic system, including a single primary leach field (West zone) with a dedicated repair area (East zone) should the primary system become compromised. The primary leach field would be located below Antelope Canal and at a lower elevation than that of the wine cave floor and the lower warehouse/processing building (see Figure 15-2). The repair area would be located downslope of the top of the property, at an elevation beneath that of the tasting room building.

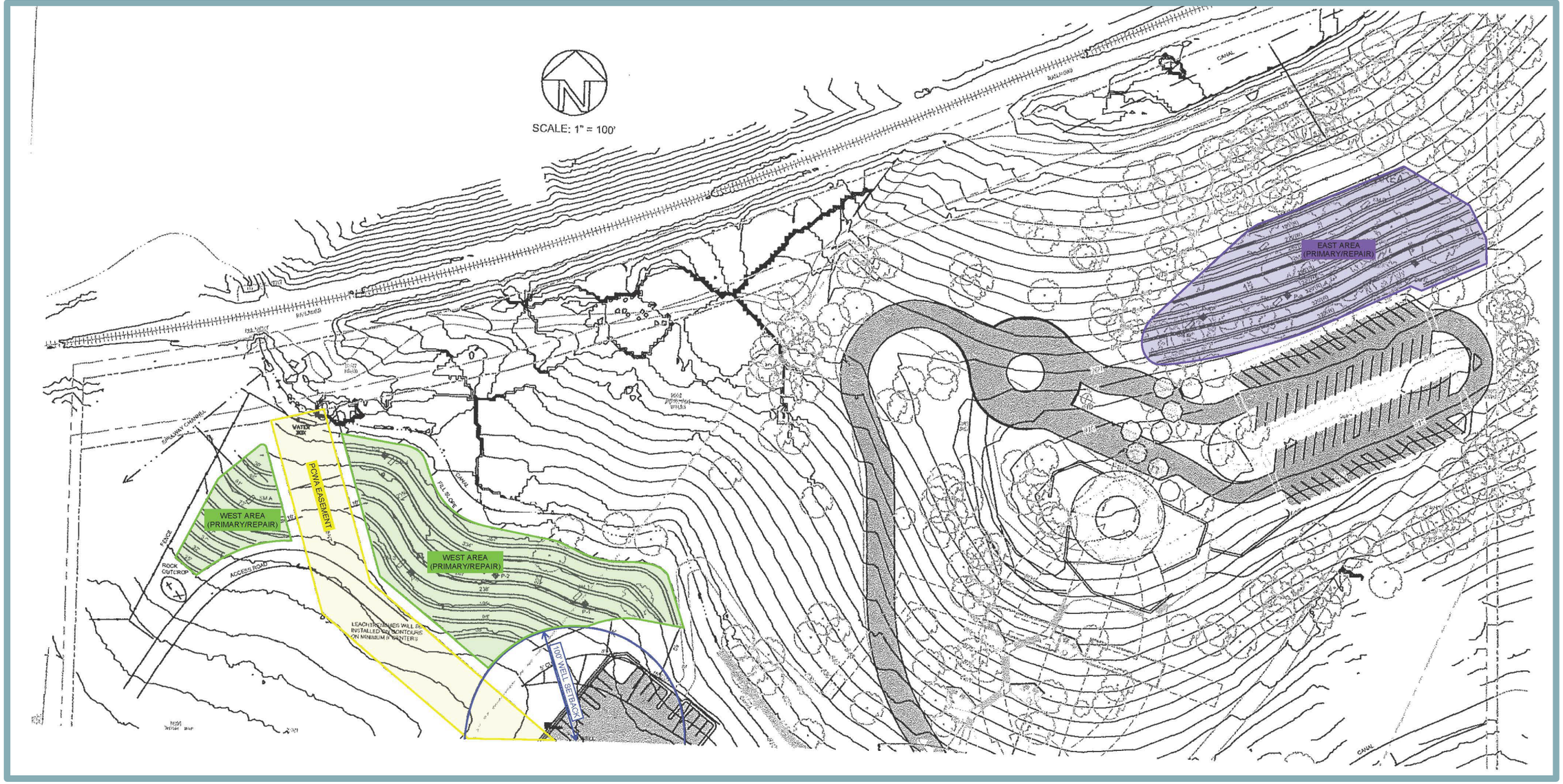
The second option being considered would consist of two smaller systems, each containing primary and leach areas in both the West and East zones. Each system would be designed to maximize effluent flow to the primary area while maintaining adequate area for repair and adequate separation between the primary and repair areas. The areas designated for repair in this case would also remain undisturbed until such time the primary system became compromised, and the repair areas became necessary for use.

It should be noted that the East zone is located on a slope that exceeds 30 percent. As such, in compliance with Placer County Environmental Health Division requirements, a Slope Stability Study for Septic Leach Field was prepared by Youngdahl Consulting Group to evaluate if the installation of the on-site septic system with a leach field would adversely affect the slope stability.[23]

Based on the analysis included in the Slope Stability Study for Septic Leach Field, Youngdahl Consulting Group determined that the slope would remain stable under saturated condition within the proposed leach field area. Please refer to Chapter 10, Geology and Soils, for additional discussion.

[23] Youngdahl Consulting Group. *7615 Callison Road, Penryn, California – Slope Stability Study for Septic Leach Field*. March 29, 2022.

Figure 15-2
On-Site Septic System Locations



According to the Septic Feasibility Report, prepared for the proposed project by Lindbloom, the two zones within the project boundary have been deemed suitable for on-site septic disposal. The West and East zones have the capability of disposing of a maximum of 4,134 gal/day and 4,421 gal/day effluent flow, respectively.

As discussed above, the total anticipated sewage flow for the proposed project is 3,525 gal/day. As such, according to the Anticipated On-Site Sewage Flows Technical Memorandum prepared for the proposed project by BEM, the second of the aforementioned design options is considered the preferred option for meeting the proposed project's sewage flow demand. Construction of the second option would result in the design and installation of two on-site septic systems in the zones designated within the septic feasibility report. Each system would be designed to accommodate approximately 1,800 to 2,000 gal/day of sewage flow, which represents less than half of each zone's respective maximum disposal capacities, thus, allowing for designated repair areas in each zone with additional margin.

Additional measures could also be taken during the detailed design phase of the on-site system(s) to further ensure adequate sewage disposal capacity is provided such as pre-treatment of effluent flows, temporary on-site storage, incorporation of a grease interceptor placed in-line with sewage generated by food preparation, and installation of automatically controlled and ultra-low flow plumbing fixtures.

Ultimately, the detailed design of the on-site septic system(s) to be installed for the proposed project would be carried out by qualified individuals during the construction document phase of the project. The final proposed design would then be evaluated by County staff as part of the permit review process. A septic permit would be obtained from the Placer County Environmental Health Division prior to building permit issuance to allow for the development of the on-site septic system.

It should be noted that, completely separate from the sanitary sewer system, the proposed project would include an on-site treatment process for the winery operation process water, which would help conserve natural resources, protect ground/surface water, and overcome land constraints. The proposed project would use a High Strength Membrane BioReactor system to remove harmful pathogens and other harmful bacteria from process water to allow for water reuse for vineyard irrigation, landscape areas, water features/fountains, and/or dust control. The High Strength Membrane BioReactor system is Napa Green Certified and could be scaled depending on the time of the year and/or processing needs. The process water treatment system would be located adjacent to the processing/warehouse building in the turnaround area on the westerly side of the project site. The system would be above ground and would be similar in appearance to two, 20-foot cargo containers placed side by side, occupying approximately 400 sf.

Based on the above, the proposed on-site septic system would be designed such that all on-site effluent flow would be treated and contained on-site. In addition, the proposed project would include on-site treatment process for the winery operation process water to help conserve natural resources, protect ground/surface water, and overcome land constraints. As such, the proposed project would not require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects.

Electricity, Natural Gas, and Telecommunications Infrastructure

The proposed project would include new connections to existing electrical and telecommunications infrastructure located in the project vicinity. Existing electrical and telecommunication distribution lines are located along Callison Road in the project vicinity, and also traverse the eastern portion of the project site. Electricity would be provided to the project site by PG&E through a new 1,200-amp, 480-volt, 3-phase main service, which would be backed up by a diesel or propane generator. The generator would be intended for emergency backup only. A portion of the existing overhead power and communication lines that traverse the site are being relocated underground by PG&E in order to reduce fire risk and enhance visual appearance (see Figure 3-10 in Chapter 3, Project Description, of this EIR). Undergrounding activities are anticipated to be completed by November 2022. In addition, an on-site solar generation system would be developed as part of the proposed project. The size and design of the on-site solar generation system has yet to be determined; however, the system is proposed to be located at the upper parking lot, as well as on the roof of the processing/warehouse building.

The proposed project would not include a natural gas connection; rather, propane would be stored on-site in three, 1,500-gallon tanks, which would be located west of the processing/warehouse building; at the utility pad; and adjacent to the octagon building (see Figure 3-11 in Chapter 3, Project Description, of this EIR). Propane would primarily be used for space conditioning, hot water heating for wine processing, operating the necessary equipment in the commercial kitchen, and powering the emergency backup generator.

Conclusion

As discussed above, water supply infrastructure currently exists on-site to serve the proposed project. In addition, while new sewer infrastructure would be developed on-site, the physical environmental effects of the new septic system have been evaluated throughout this EIR. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-6 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Based on the analysis below, the impact is *less than significant*.

The proposed project would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. As discussed above, the average water demand for typical use (i.e.,

353 days per year) is 3.32 gpm, which is below the maximum capacity of 25 gpm for the pump that is currently installed in the well.

The DWR Water Data Library provides groundwater level data for wells throughout the State. The well information can reveal trends related to groundwater levels along with short-term and long-term cycles. The nearest wells to the project site for which data are available in the Water Data Library are in Rocklin and Lincoln. The data from the nearest wells indicate that groundwater levels in the region are not substantially affected by fluctuations from wet periods to drought periods.[24] In addition, according to the 20-year evaluation of the proposed water system's supply capacity included in the Domestic Water System Permit Application Technical Report prepared for the proposed project, based on other small privately owned water systems in Placer County (e.g., Wise Villa Winery, Turkey Creek Golf Club, Gold Hill Mobile Home Park), groundwater wells in the area are capable of producing the amount of water necessary to meet the proposed project's MDD. Moreover, the proposed water system is a transient, non-community system and can put operations on hold should the water supply fall below acceptable levels to maintain full operations.

Furthermore, as discussed in Chapter 12, Hydrology and Water Quality, of this EIR, an analytical model was developed to calculate the drawdown of the groundwater levels that would occur due to pumping from Public Well 20-2 under three scenarios. Based on the results of the analytical model, the reductions in the water column at the nearest neighboring well are considered to be de minimis and would not impact the use of the neighboring 7585 Callison Road well. Because the magnitude of the change in groundwater levels that would occur during pumping of Public Well 20-2 would decrease radially away from the well, the effects at more distant wells would be appreciably less than what are identified for the nearest well at 7585 Callison Road. Therefore, the use of Public Well 20-2 for the project operations would not have any adverse effects on the wells of neighboring property owners.

Conclusion

Based on the above, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-7 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Based on the analysis below, the impact is *less than significant*.

As discussed above, the proposed project would not connect to a public sewer system, but rather its wastewater would be processed by an on-site septic system that would be

[24] EMKO Environmental, Inc. *Public Well Impact Evaluation – Project 8 Winery.* June 25, 2022.

compliant with State and County requirements. Two options are being considered for the septic system, including a single primary leach field (West zone) with a dedicated repair area (East zone) should the primary system become compromised, and two smaller systems, each containing primary and secondary leach areas in both the West and East zones.

According to the Septic Feasibility Report prepared for the proposed project by Lindbloom, the two zones within the project boundary have been deemed suitable for on-site septic disposal. The West and East zones have the capability of disposing of a maximum 4,134 gal/day and 4,421 gal/day of effluent flow, respectively. As discussed above, the total anticipated sewage flow for the proposed project is 3,525 gal/day. As such, the on-site septic system would have adequate capacity to serve the project's projected demand.

Ultimately, the detailed design of the on-site septic system(s) to be installed for proposed project would be carried out by qualified individuals during the construction document phase of the project. The final proposed design would then be evaluated by County staff as part of the permit review process. A septic permit would be obtained from the Placer County Environmental Health Division prior to building permit issuance to allow for the development of the on-site septic system.

Based on the above, the proposed on-site septic system would be designed such that all on-site effluent flow would be treated and contained on-site. Therefore, the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate wastewater treatment capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-8 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is *less than significant*.

Most solid waste collected in unincorporated Placer County is delivered to the WPWMA MRF where waste is processed, recyclables are recovered, and residuals are disposed. The proposed project would generate solid waste associated with construction activities as well as from future residents of the proposed project. Construction debris would be disposed of in accordance with applicable federal, State, and local regulations and standards. Solid waste collection services would be provided by Recology Auburn Placer and the WRSL and MRF.

As described above, the 320-acre WRSL has a remaining capacity of 22,690,011 cubic yards,[25] a maximum daily throughput of 1,900 tons, and a permitted lifespan extending to 2058.[26] The MRF has a permitted processing limit of 2,200 tons per day and 1,014 vehicles per day. The average weekday tonnage received at the MRF for 2021 was 885 tons, which is 1,315 tons per day less than the permitted amount.[27] Considering the remaining daily capacity at the MRF is 1,315 tons, the MRF has a remaining annual capacity of at least 479,975 tons.

According to the U.S. Environmental Protection Agency's (USEPA's) report, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, nonresidential construction activities generate an average of 4.34 pounds per square foot (lbs/sf) of waste.[28] The proposed project would result in a total building square footage of approximately 58,830 sf, construction of which would produce approximately 255,322 lbs (128 tons) of construction waste (4.34 lbs/sf X 58,830 sf).

The construction waste estimate presented above represents a conservative analysis of the maximum potential waste production from construction of the proposed project. The CALGreen Code requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. As such, a minimum of approximately 83 tons of waste would be diverted away from landfill disposal during construction. Considering the applicable CALGreen Code requirements, buildout of the proposed project would be anticipated to produce up to 45 tons of waste during construction. Construction waste generation represents a short-term increase in waste generation. The WRSL is permitted to accept 693,500 tons per year. Therefore, construction waste associated with the proposed project would represent approximately 0.006 percent of the WRSL's total annual permitted capacity.

During operation of the project, solid waste would be produced primarily from the on-site accessory restaurant and on-site events. Solid waste would be collected by Recology and transferred to the WRSL. Operational solid waste generation from the proposed accessory restaurant has been estimated based on an average waste generation rate for restaurant uses of one pound per seat per day.[29] As such, the proposed accessory restaurant would produce approximately 32 pounds of solid waste per day, or approximately 5.84 tons per year.

In addition, according to a targeted waste characterization study prepared by the California Environmental Protection Agency (CalEPA) CIWMB, public venues and events typically result in a waste disposal rate of approximately 172 pounds per 100 visitors. Operations of the proposed project would include up to 208 Agricultural Promotional Events with a maximum of 75 attendees each, as well as a 12 Special Events with a maximum of 200

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25 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. 2022.

26 Western Placer Waste Management Authority. *About WPWMA*. Available at: https://www.wpwma.ca.gov/about-wpwma/. Accessed July 2022.

27 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. 2022.

28 U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts.* 2009.

29 California Department of Resources Recycling and Recovery. *Estimated Solid Waste Generation Rates*. Available at: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed July 2022.

attendees each. Based on the targeted waste characterization study assumptions, Agricultural Events could result in approximately 26,832 pounds (or 13.42 tons) of waste each year, and Special Events could result in approximately 4,128 pounds (or 2.06 tons) of waste per year. Combined, the total estimated waste generated by events on-site would be 15.48 tons per year.

The total solid waste generated by the accessory restaurant and on-site events would be 21.32 tons per year. A total of 21.32 tons per year would equate to approximately 0.003 percent of the WRSL's annual permitted capacity. A contribution of a maximum of 0.003 percent of the WRSL's total annual permitted capacity would not be considered a substantial amount of waste, and the WRSL has adequate capacity to accept such waste. Therefore, the project would not be considered to contribute significant amounts of waste to the WRSL, and the WRSL has sufficient capacity to handle the increase in waste anticipated to be generated by implementation of the proposed project.

Based on the above, construction and operation of the proposed project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. In addition, the project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The geographic scope for the cumulative public services and utilities analysis generally includes buildout of the proposed project in conjunction with the Bickford Ranch Specific Plan (BRSP) and HBPCP. For further detail related to the cumulative setting of the proposed project, refer to Chapter 20, Statutorily Required Sections, of this EIR.

15-9 Cumulative impacts to public services. Based on the analysis below, the cumulative impact is *less than significant*.

Potential cumulative impacts related to fire and sheriff protection services, schools, public services and government facilities, and parks and recreation are discussed below.

Fire Protection Services

The Placer County General Plan EIR does not identify cumulative impacts related to fire protection. Rather, impacts were determined to be reduced to less-than-significant levels through implementation of the goals and policies included in the General Plan. Such

policies require provision of adequate funding and an adequate water supply as a component of new development approval.

In addition, the 2015 BRSP Development Agreement requires the BRSP applicant to commence construction of a new fire station within the BRSP (Parcel PF-1) no later than issuance of the 1,000th residential building permit for BRSP and diligently pursue its construction through to completion within 12 months of the fire station construction start date.[30] Given that Phase 1 of the BRSP includes 1,010 units, construction of the fire station is expected to commence before construction of the proposed project. The BRSP applicant would be required to pay a fee to the County, which would be used to purchase equipment for the new fire station. Pursuant to a current contractual agreement with the County, CAL FIRE would serve as the fire protection services provider for the new station. With the addition of the new fire station, emergency response times in the project area would improve upon current response times.

As discussed above, response time goals have not currently been adopted by the PFPD, who would be the first responder to the project site. In addition, the PFPD and NFPD, in conjunction with the PHFPD, would be capable of serving the project site with existing equipment and facilities. Furthermore, the project would be required to pay a development impact fee to PFPD and the NFPD. Moreover, development within the project site, as well as other future development throughout Placer County, including the buildout of the HBPCP and BRSP areas, would be required to comply with all applicable regulations imposed by PFPD and NFPD, and the CFC, as adopted by Section 15.04.510 of the Placer County Code. Based on the above, the proposed project would result in a less-than-significant cumulative impact related to fire protection services.

Sheriff Protection Services

The Placer County General Plan EIR did not identify cumulative impacts related to sheriff protection services. Rather, impacts were determined to be reduced to less-than-significant levels through implementation of the goals and policies included in the General Plan. Policy 4.H.2 of the Placer County General Plan sets a response time goal of eight minutes for suburban areas. In addition, the BRSP EIR did not identify any cumulative impacts related to sheriff protection services

As discussed above, access to the project site would be provided by a gated entry which would be operated by a gate house. The gate house is proposed to be developed adjacent to the gates at the main entrance from Callison Road, and would house controls for the gates and exterior lighting for the entrance and lower roadway. The gate house would be controlled primarily by a virtual attendant; however, non-virtual occupancy would occasionally occur. As such, the proposed project would include built-in security to the site, which is anticipated to reduce law enforcement demands associated with the proposed project. In addition, though response times are dependent upon the location of patrol officers at the time of the emergency call, on average, response times to the project site would be anticipated to be within the Placer County General Plan's eight-minute response time standard for suburban areas. As a result, the proposed project would not result in a need for new, or improvements to existing, sheriff protection

[30] Placer County. *Amended and Restated Development Agreement by and between the County of Placer and LV Bickford Ranch, LLC, relative to the Bickford Ranch Specific Plan.* December 8, 2015.

facilities, construction of which could cause significant environmental impacts. Similar to the proposed project, other future development within the region would be required to address impacts related to sheriff protection services on a project-by-project basis. Based on the above, the proposed project, in combination with future development occurring under buildout of the HBPCP and BRSP, would have a less-than-significant impact to sheriff protection services.

Public Facilities and Government Services

As discussed previously, development of the proposed project would result in development of a winery, and would not add additional residents nor substantial jobs to the area. While approximately 12 employment opportunities would be provided by the proposed project during normal operations, the employment opportunities are expected to be filled by existing residents of the area. Project-generated traffic could result in an incremental increase in maintenance of County roads in the project area; however, such an increase would be negligible. Similarly, given that the proposed project would not add additional residents to the area, the project would not result in additional demand on libraries or other public facilities and services, would not result in the alteration of existing facilities or the construction of new facilities. The proposed project, as well as other development in the unincorporated County, would be required by the County to pay Development Impact Fees, which would help to fund and sustain public facilities and services, including public roads, within Placer County. The proposed project, in combination with future development occurring under buildout of the HBPCP and BRSP, would result in a less-than-significant cumulative impact.

Conclusion

Based on the above, the proposed project, in combination with future development occurring under buildout of the HBPCP and BRSP, would result in a ***less-than-significant*** cumulative impact related to public services and recreation.

Mitigation Measure(s)

None required.

15-10 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout in the HBPCP and BRSP areas. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The following discussion provides an analysis of the proposed project's contribution to cumulative impacts related to the increased demand for utilities and service systems within the project area.

Water Supply

Groundwater within the project site is provided by a fractured hard rock aquifer rather than a groundwater basin. Therefore, the aquifer is relatively limited in geographical extent, and the cumulative setting for water supply would be limited to the aquifer boundaries. As discussed above, the use of Public Well 20-2 for the project operations would not have any adverse effects on the wells of neighboring property owners.

In addition, according to the 20-year evaluation of the proposed water system's supply capacity included in the Domestic Water System Permit Application Technical Report prepared for the proposed project, based on other small privately owned water systems in Placer County (e.g., Wise Villa Winery, Turkey Creek Golf Club, Gold Hill Mobile Home Park), groundwater wells in the area are capable of producing the amount of water necessary to meet the proposed project's MDD. Moreover, the proposed water system is a transient, non-community system and can put operations on hold should the water supply fall below acceptable levels to maintain full operations. Furthermore, the use of Public Well 20-2 for the project operations would not have any adverse effects on the wells of neighboring property owners. Therefore, given that the transient, non-community water system would adequately provide water to the proposed project, the proposed project's contribution to the significant cumulative impact related to water supply facilities would be less than cumulatively considerable.

Wastewater Treatment

As noted previously, sanitary sewer service would be processed by an on-site septic system that would be compliant with State and County requirements. Two options are being considered for the septic system, including a single primary leach field (West zone) with a dedicated repair area (East zone) should the primary system become compromised, and two smaller systems, each containing primary and secondary leach areas in both the West and East zones.

According to the Septic Feasibility Report prepared for the proposed project by Lindbloom, the two zones within the project boundary have been deemed suitable for on-site septic disposal. The West and East zones have the capability of disposing of a maximum 4,134 gal/day and 4,421 gal/day of effluent flow, respectively. As discussed above, the total anticipated sewage flow for the proposed project is 3,525 gal/day. As such, the on-site septic system would have adequate capacity to serve the project's projected demand. Given that the on-site septic system would have adequate capacity to serve the project's projected demand, the project would not be required to connect to the County's existing wastewater treatment and conveyance infrastructure. Therefore, cumulative impacts would not occur because the on-site leach field would serve wastewater generated on-site only.

Based on the above, the proposed project would not contribute to the significant cumulative impact related to wastewater treatment facilities, because all wastewater treatment would occur privately on-site, and the proposed project would result in a less-than-significant cumulative impact related to wastewater treatment.

Electricity, Natural Gas, and Telecommunications Facilities

Environmental effects associated with the construction of new or expanded electricity, propane, and telecommunications facilities would primarily be project-specific, rather than cumulative. As noted under Impact 15-5 above, while the project would include new connections to existing electrical and telecommunications infrastructure located in the project vicinity, substantial extension of existing off-site infrastructure would not be required. In addition, the proposed project would not include a new connection to existing natural gas infrastructure. Rather, the proposed project would rely on three, 1,500-gallon on-site propane tanks. Therefore, the proposed project would result in a less-than-

significant cumulative impact related to construction of new or expanded electricity, natural gas, and telecommunications facilities.

Solid Waste

As noted previously, solid waste collection services for the proposed project would be provided by Recology Auburn Placer, as well as the WRSL and MRF. With the current space available and the recovery efforts by the MRF, the WRSL is anticipated to operate through 2058.[31] The WRSL can accommodate the incremental increase in demand for solid waste collection and disposal services that would result from implementation of the proposed project. Therefore, the proposed project's incremental contribution to the cumulatively considerable impact to solid waste would be considered less than cumulatively considerable.

Conclusion

Based on the above, the proposed project would use private water and wastewater facilities on-site, which have adequate supplies and capacity, respectively, to serve the proposed project. In addition, the project would not be anticipated to result in significantly more intense solid waste generation than was previously anticipated for the project site in the HBPCP and BRSP. The project would not result in any significant cumulative impacts related to electrical, natural gas, and telecommunications infrastructure. Thus, the project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

[31] Western Placer Waste Management Authority. *About WPWMA*. Available at: https://www.wpwma.ca.gov/about-wpwma/. Accessed July 2022.

16. TRANSPORTATION

16. TRANSPORTATION

16.1 INTRODUCTION

The Transportation chapter of the EIR discusses the existing transportation and circulation facilities within the project vicinity, as well as applicable policies and guidelines used to evaluate operation of such facilities. Where development of the proposed project would conflict with applicable policies or guidelines, mitigation measures are identified. The information contained within this chapter is primarily based on the Transportation Impact Analysis prepared for the proposed project by KD Anderson & Associates, Inc. (see Appendix R of this EIR),[1] as well as the Placer County General Plan,[2] the Placer County General Plan EIR,[3] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[4]

At the beginning of 2019, updated California Environmental Quality Act (CEQA) Guidelines went into effect. The new CEQA Guidelines require lead agencies such as Placer County to transition from using "level of service" (LOS) to "Vehicle Miles Traveled" (VMT) as the metric for assessing transportation impacts under CEQA (see CEQA Guidelines Section 15064.3). The State's requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in greenhouse gas (GHG) emissions. Pursuant to the CEQA Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use VMT rather than LOS as the metric to analyze transportation impacts. LOS will still be used by the County for purposes of determining consistency with General Plan and community plan goals and policies but is no longer used for determining significant transportation impacts under CEQA.

Consistent with the County of Placer Transportation Study Guidelines (November 2020), both a VMT analysis and Local Traffic Operational Analysis (LTA) were prepared for the proposed project by KD Anderson & Associates, Inc. Pursuant to CEQA Guidelines Section 15064.3, impact significance in this chapter is based upon VMT, whereas the results of the LTA will be used by the County, separate from the analysis in this EIR, to address consistency with Placer County General Plan goals and policies related to transportation, including adopted LOS policies. In instances where a project conflicts with the County's adopted LOS policies, the County maintains full discretion to require a project to ensure consistency through project conditions of approval. Where applicable, this chapter incorporates the analysis in the LTA to address potential safety impacts related to transportation.

16.2 EXISTING ENVIRONMENTAL SETTING

The section below describes the physical and operational characteristics of the existing transportation system within the study area, including the surrounding roadway network, transit, bicycle, and pedestrian facilities.

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1 KD Anderson & Associates, Inc. *Transportation Impact Analysis for Project 8 Winery, Placer County, California.* October 28, 2022.
2 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

Existing Roadways

The following sections provide a summary of the existing roadways within the project area. As shown in Figure 16-1, regional access to the study area is served by four State highways that traverse Placer County, a County arterial, and several collector roads.

Interstate 80

Interstate 80 (I-80) is the primary east-west arterial across Placer County and Northern California. The segment of I-80 located in the project vicinity is a six-lane controlled access freeway. Access to I-80 from the project site is provided by way of interchanges with Penryn Road, Newcastle Road, and State Route (SR) 193/Ophir Road near the City of Auburn.

The California Department of Transportation (Caltrans) provides annual reports on the volume of traffic on the State highway system. Recent counts available from Caltrans report an Annual Average Daily Traffic (AADT) volume of 92,000 vehicles per day west of Penryn Road, 84,000 AADT west of Newcastle Road, 82,000 AADT east of Newcastle Road, and 83,000 AADT east of the I-80/Ophir Road interchange.

State Route 193

SR 193 is an east-west route that connects the City of Lincoln with I-80 across the study area. SR 193 originates in Lincoln as McBean Park Drive and becomes SR 193 approximately 1.4 miles west of the SR 193/Sierra College Boulevard intersection and continues from that point to I-80. In the project vicinity, SR 193 is a two-lane conventional highway. Caltrans data indicate that, in 2020, SR 193 carried 10,700 AADT west of Sierra College Boulevard and 7,800 AADT from Sierra College Boulevard to Fowler Lane. The volumes decline to 5,000 AADT from Fowler Lane to Taylor Road. Trucks comprise nine percent of the daily traffic on SR 193 east of Sierra College Boulevard.

Taylor Road

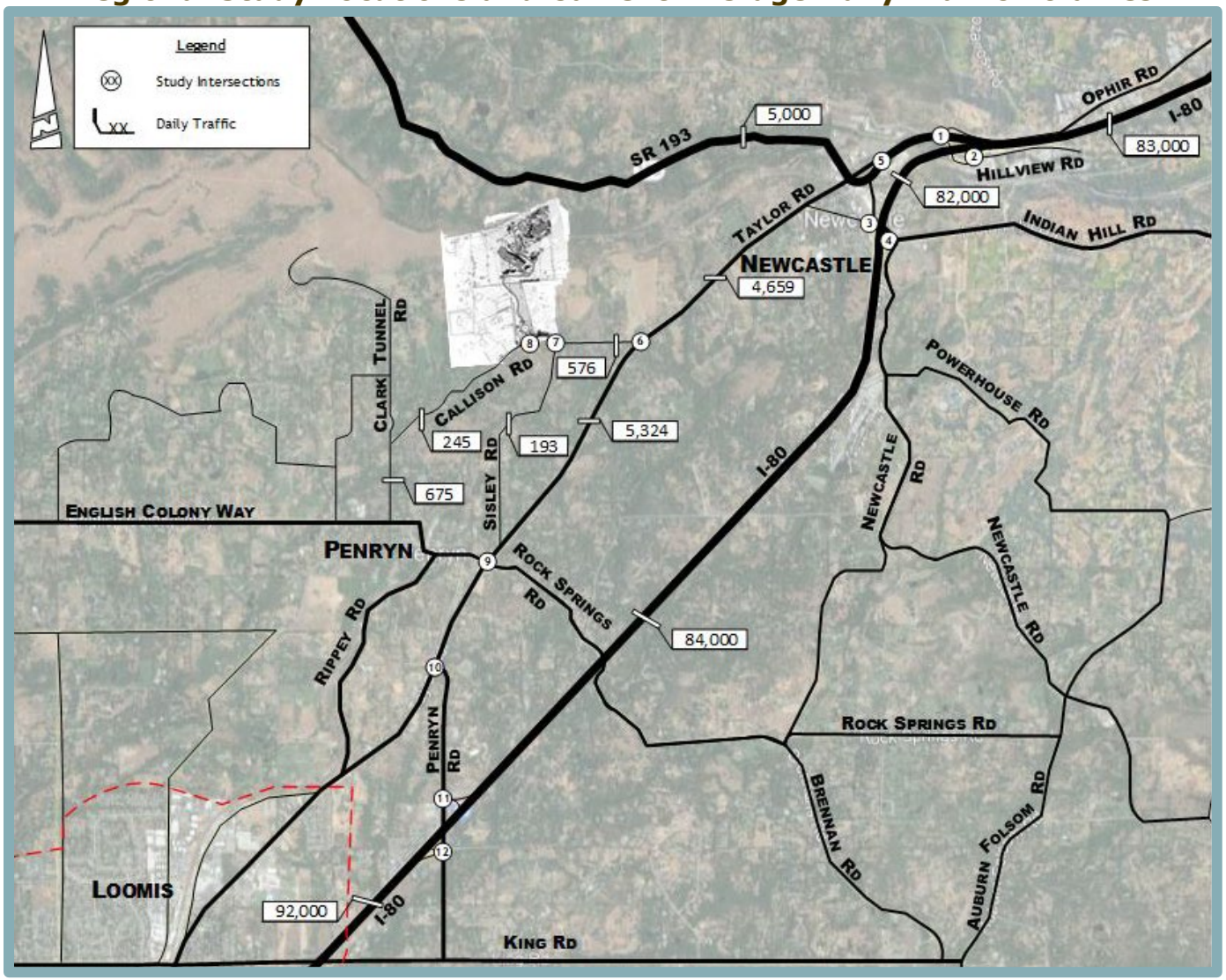
Taylor Road is a major road that runs parallel to I-80 and links the project site with Penryn, the Town of Loomis, and the City of Rocklin to the west, and with the communities of Newcastle and Ophir and the City of Auburn to the east. The Placer County General Plan designates Taylor Road as a rural arterial in the area east of the Town of Loomis. The HBPCP identifies Taylor Road as an arterial.

Taylor Road is generally a two-lane road. In the project vicinity, Taylor Road has one travel lane in each direction and separated turn lanes at most major intersections. On-street parking is prohibited in the general area of the project site in Placer County. The posted speed limit on Taylor Road is 50 miles per hour (mph) in the project vicinity east of the Town of Loomis and declines to 35 mph through Newcastle. Weekday daily traffic counts conducted in 2022 for the Transportation Impact Analysis indicate that Taylor Road carries 5,324 vehicles per day in the area from English Colony Way to Callison Road and 4,655 vehicles per day from Callison Road to Newcastle. Taylor Road links the project area to other streets of regional importance by way of the intersections discussed below.

Penryn Road

Penryn Road is a north-south road that links Taylor Road with I-80 and King Road to the south. Penryn Road is designated as a rural collector in the Placer County General Plan. The segment from King Road to Taylor Road is identified as an arterial by the HBPCP, while the segment from Taylor Road to English Colony Way is designated as a collector.

Figure 16-1
Regional Study Locations and Current Average Daily Traffic Volumes



Source: KD Anderson & Associates, Inc., 2022.

Penryn Road is a two-lane road with separated left-turn lanes or two-way left-turn (TWLT) lanes at key intersections.

English Colony Way

English Colony Way is a two-lane east-west roadway that links Sierra College Boulevard with Taylor Road. The General Plan identifies English Colony Way as a rural collector, and the HBPCP identifies the road as an arterial.

Rock Springs Road

Rock Springs Road extends in a southeasterly direction from the Taylor Road/English Colony Way intersection to Auburn Folsom Road. The two-lane road is designated as a rural collector in the County General Plan and as a collector in the HBPCP.

Callison Road

Callison Road is a local rural road that provides access to the rural area north of Penryn. Callison Road extends west from Taylor Road for approximately 1.33 miles to Clark Tunnel Road. Between Taylor Road and Clark Tunnel Road, Callison Road proceeds across a Union Pacific Railroad (UPRR) gated crossing, approximately 2,300 feet to the west of Taylor Road. The project site's access is on a section of Callison Road located immediately west of the UPRR crossing and within the UPRR right-of-way (ROW).

Callison Road is a two-lane rural road with varying pavement and does not include shoulders. The pavement width ranges from 22 to 24 feet along the segment that extends from the UPRR crossing to Taylor Road. From the UPRR crossing to Clark Tunnel Road, the width ranges from 16 to 20 feet. Callison Road does not have a posted speed limit. Thus, the California Vehicle Code's prima facie rural 55 mph speed limit would be applicable. Curve ahead warning signs suggest an advisory speed of 20 mph through the UPRR crossing and 15 mph through a reversing curve located between the project site and Clark Tunnel Road. A daily traffic count conducted as part of the Transportation Impact Analysis indicates that Callison Road carries 245 vehicles per day from Clark Tunnel Road to the UPRR crossing and 576 vehicles per day from the crossing to Taylor Road.

Clark Tunnel Road

Clark Tunnel Road is a local rural road that extends north from English Colony Way for approximately two miles to provide access to the rural community between the UPRR tracks and English Colony Way. Callison Road intersects with Clark Tunnel Road approximately 0.5-mile north of English Colony Way. Clark Tunnel Road is a two-lane rural road with varying pavement width and does not include shoulders. The pavement width on Clark Tunnel Road ranges from 20 to 22 feet from English Colony Way to Callison Road. A 30 mph speed limit is posted on Clark Tunnel Road north of English Colony Way. A daily traffic count conducted for the Transportation Impact Analysis indicates that Clark Tunnel Road carries 675 vehicles per day north of English Colony Way.

Sisley Road

Sisley Road is a local rural road that extends north from Taylor Road near the Taylor Road/English Colony Way intersection for about 1.1 miles to Callison Road near the UPRR crossing. Sisley Road is a two-lane road with pavement in poor condition and width that ranges from 16 to 22 feet without shoulders. The rural prima facie speed limit applies. A 25 mph advisory speed is posted on a curve located at the midway point of the road segment. A daily traffic count conducted for

the Transportation Impact Analysis indicates that Sisley Road carries 193 vehicles per day north of Taylor Road.

Nearby Intersections

The following intersections are located in the project area, with the intersection numbers below corresponding with those presented in Figure 16-1.

1. Ophir Road/Taylor Road (SR 193)/I-80 Westbound Ramps

The Ophir Road/Taylor Road (SR 193)/I-80 Westbound Ramps intersection is controlled by stop signs on all approaches. Each approach has a single travel lane, with the exception of the eastbound Taylor Road approach, where a separated "free" right-turn lane is not controlled by the stop sign. The intersection does not include marked crosswalks.

2. Hillview Road/SR 193/I-80 Eastbound Ramps

The Hillview Road/SR 193/I-80 Eastbound Ramps intersection is controlled by stop signs on the I-80 off-ramp and on the Hillview Road approach. Each approach has a single travel lane, with the exception of the I-80 off-ramp, where a separated "free" right-turn lane is not controlled by the stop sign. The intersection does not include crosswalks.

3. Old State Highway/Newcastle Road/I-80 Westbound Ramps

In Newcastle, the Old State Highway/Newcastle Road/I-80 Westbound Ramps intersection is controlled by a stop sign on the I-80 off-ramp. Each approach has a single travel lane. Crosswalks are marked on the north and west legs of the intersection.

4. Newcastle Road/Indian Hill Road/I-80 Eastbound Ramps

The Newcastle Road/Indian Hill Road/I-80 Eastbound Ramps intersection is controlled by a traffic signal. On Newcastle Road, the northbound approach configuration includes a separated left-turn lane, through lane, and right-turn lane. The southbound approach features a left-turn lane and a combined through and right-turn lane. The left-turn lanes on Newcastle Road operate with "protected" phasing. The I-80 eastbound off-ramp and Indian Hill Road approaches are operated as "split" phases. The two-lane off-ramp is marked as a combined left-turn and through lane alongside a combined through and right-turn lane. The Indian Hill Road approach has a combined through and left-turn lane and a separated right-turn lane. Crosswalks are marked on the intersection's south and west legs.

5. SR 193 (Old State Highway)/Taylor Road

The SR 193 (Old State Highway)/Taylor Road intersection is controlled by an all-way stop. Each approach has a single travel lane, with the exception of the westbound Taylor Road approach, which provides a left-turn lane. The intersection does not include crosswalks.

6. Taylor Road/Callison Road

The Taylor Road/Callison Road intersection is "tee" controlled by a stop sign on the Callison Road approach. The Callison Road approach travels through a 60-foot radius curve immediately north of Taylor Road. Each approach has a single travel lane. The intersection does not include crosswalks.

7. Callison Road/Sisley Road

The Callison Road/Sisley Road intersection is located 180 feet from the UPRR crossing and is "tee" controlled by a stop sign on the Sisley Road approach. Each approach has a single travel lane. The intersection does not include crosswalks.

8. Callison Road/Private Driveway (Project Site)

The Callison Road/private driveway intersection would be constructed as part of the proposed project. The intersection would be a "tee" intersection.

9. Taylor Road/English Colony Way/Rock Springs Road

The Taylor Road/English Colony Way/Rock Springs Road intersection is controlled by an all-way stop. Taylor Road has separated left-turn lanes and a separated westbound right-turn lane. The Rock Springs Road approach has a single lane. The two-lane English Colony Way approach has a separated right-turn lane outside of the stop sign. The intersection also has an overhead flashing beacon. The intersection does not include crosswalks.

10. Taylor Road/Penryn Road

The Taylor Road/Penryn Road intersection is signalized. Taylor Road has separated left-turn lanes with protected phasing. The two-lane Penryn Road approach has a separated right-turn lane. The intersection does not include crosswalks.

11. Penryn Road/I-80 Westbound Ramps/Boyington Road

The Penryn Road/I-80 Westbound Ramps/Boyington Road intersection is controlled by a traffic signal. The Penryn Road approaches have separated left-turn lanes that operate with protected signal phases. The Boyington Road and I-80 ramp approaches have single lanes, and the legs operate with "split" phases. Crosswalks are marked on the north, east, and west legs of the intersection.

12. Penryn Road/I-80 Eastbound Ramps/Boulder Creek Lane

The Penryn Road/I-80 Eastbound Ramps/Boulder Creek Lane intersection is controlled by stop signs on the off-ramp and Boulder Creek Lane approaches. Separate left-turn lanes are provided on the Penryn Road approaches. The off-ramp and Boulder Creek Lane approach have single lanes, but the off-ramp approach has an eight-foot shoulder and corner radius that allows right turns to proceed around the queue of traffic waiting to turn left.

Vehicle Miles Traveled

Pursuant to CEQA Guidelines Section 15064.3, VMT is the primary metric used to identify transportation impacts under CEQA. VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. VMT does not directly measure traffic operations; instead, VMT is a measure of transportation network use and efficiency, especially when expressed as a function of population (i.e., VMT per capita). VMT tends to increase as land use density decreases and travel becomes more reliant on the use of single-passenger vehicles. The project site does not currently generate VMT. The existing environmental setting section for VMT would typically include baseline VMT data for the proposed land use type. For example, an environmental document for a proposed residential subdivision project might provide VMT per capita data for a region of the County, such as that which corresponds to a particular Traffic Analysis Zone (TAZ) in the regional travel demand model. In the case of a winery land use type, review of the SACSIM model employed under County guidelines indicates that wineries are not a land use that can be represented in the travel demand model. Thus, for this EIR, an alternative

approach was needed and was selected in consultation with Placer County staff. As part of the selected approach, VMT data was collected from other wineries in Placer County.

Table 16-1 presents the wineries in Placer County where average VMT was identified and average trip length was determined. In each case the total annual VMT addresses all travel to and from the winery, including trips by employees, guests and deliveries. As indicated, six Placer County wineries were investigated. The average trip length for these Placer County wineries ranged from a low of 9.82 miles to a high of 12.31 miles. The average for these six wineries was 11.09 miles.

Table 16-1
Average Trip Length for Representative Placer County Wineries

Parameter	Placer County Wineries					
	Mount Vernon	**Dono Del Cielo**	**Lone Buffalo**	**Vina Castellano**	**Rock Hill**	**Giotti Cellars**
Characteristics						
Placer County Classification	Large	Large	Medium	Medium	Medium	Small
Events Offered	Yes	--	Yes	Yes	Yes	Yes
Restaurant	No	No	No	No	No	No
Full Liquor License	No	No	No	No	No	No
Tasting Days Open	Th, F, Sa, Su	Th, F, Sa, Su	F, Sa, Su	Th, F, Sa, Su	Sa, Su	F, Sa, Su
Food Days Open	N/A	N/A	N/A	N/A	N/A	N/A
VMT and Average Trip Length						
Annual Average Daily VMT	783	927	727	1,096	388	484
Average Trip Length	10.3	11.88	9.82	12.31	11.07	10.74

Note: -- indicates that such information was not available.

Source: KD Anderson & Associates, Inc., 2022.

Pedestrian, Bicycle and Transit Facilities

The sections below describe the existing pedestrian, bicycle and transit facilities located within the vicinity of the project site, which are limited to locations where frontage roadway improvements have been completed as a result of previous development.

Sidewalks and Paths

Sidewalks do not exist along the rural roads in the project vicinity. Pedestrians make use of any shoulder available or proceed along with vehicles on the lightly traveled roads near the project site. As discussed below, a multi-use path is located along English Colony Way near Penryn Elementary School, approximately 1.1 miles southwest of the project site entrance.

Bicycle Facilities and Trails

The Placer County Regional Bikeway Plan provides information regarding the regional system of bikeways for transportation and recreation purposes. The regional bikeway plan was approved by the Placer County Transportation Planning Agency (PCTPA) Board in 2018 and subsequently adopted by the Placer County Board of Supervisors. The Placer County Regional Bikeway Plan includes the following system classifications:

- Class I Bikeway (Bike Path) provides a completely separated facility designed for the exclusive use of cycles and pedestrians.
- Class II Bikeway (Bike Lane) provides on-road striped lanes with signs and pavement markings and legends with restricted travel to motor vehicles and pedestrians. Through travel by motor vehicles or pedestrians is prohibited, but crossflows by pedestrians and motorists is permitted.
- Class III Bikeway (Bike Route) provides on-street routes designated by signs or permanent markings and shared with pedestrians and motorists.
- Class IV Bikeway (Separated Bikeway) is a bikeway for the exclusive use of bicycles similar to a Class II facility, but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

A Class I path is located along the northerly side of English Colony Way from the UPRR crossing to immediately west of Penryn Elementary School. Additionally, Class II bike lanes are located along both sides of Taylor Road.

As described in the Placer County Regional Bikeway Plan and presented in Figure 16-2, a Class IV bikeway is planned along Taylor Road from Loomis to the I-80/Ophir Road interchange. Class II lanes are planned along English Colony Way from Penryn Elementary School to Taylor Road and for SR 193. A designated bike route is planned along English Colony Way west of Penryn Elementary School to Sierra College Blvd and along Newcastle Road south of I-80. In addition, a bike route with climbing lanes is planned along Indian Hill Road from I-80 to the City of Auburn.

Transit System

Placer County Transit provides bus service to most of the urbanized south Placer County area, but services are limited in the rural study area evaluated by the Transportation Impact Analysis. The Auburn Station on Nevada Street in the City of Auburn is the hub for service in Western Placer County. Placer County Transit's Taylor Road Shuttle travels between Auburn and Sierra College in Rocklin.

The Taylor Road Shuttle Route 50 follows Ophir Road between Auburn and the Ophir Park-&-Ride lot on I-80 (Stop 5001) and then follows Taylor Road to the SR 193/Taylor Road stop (Stop 5002) and Taylor Road/English Colony Way stop (Stop 5003). Stop 5003 is about 1.25 miles to the south of the project site's entrance on Callison Road. Route 50 provides service from 6:40 AM to 8:20 PM, Monday through Saturday. The shuttle deviates 0.75-mile from Taylor Road on reservation only.

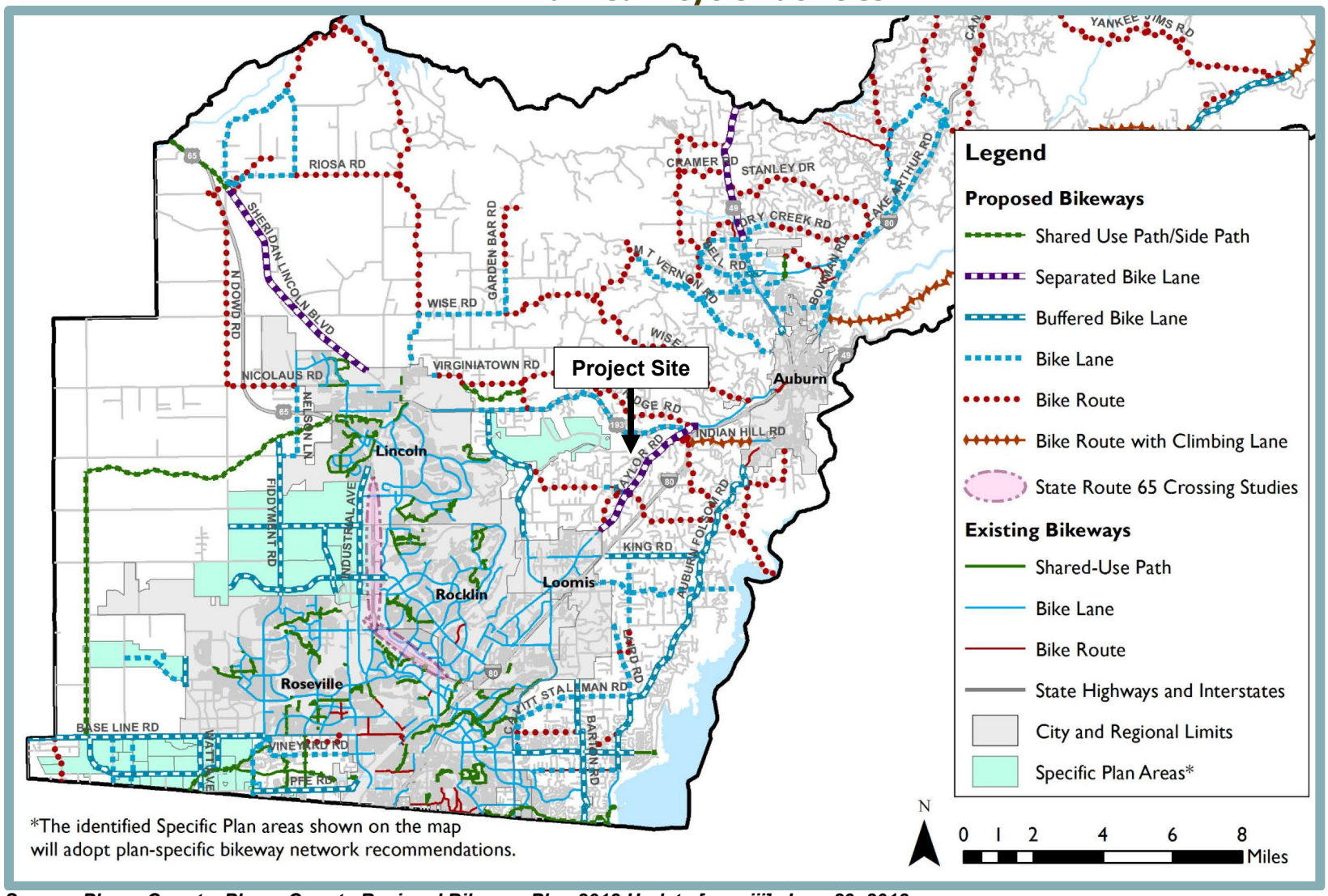
16.3 REGULATORY CONTEXT

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below and provide a context for the impact discussion related to the project's consistency with the applicable regulatory conditions. Federal plans, policies, regulations, or laws related to transportation and circulation are not directly applicable to the proposed project. Rather, the analysis presented herein focuses on State and local regulations, which govern the regulatory environment related to transportation and circulation at the project level.

State Regulations

The following are the regulations pertinent to the proposed project at the State level, organized chronologically.

Figure 16-2
Planned Bicycle Facilities



Source: Placer County. Placer County Regional Bikeway Plan 2018 Update [pg. viii]. June 29, 2018.

Senate Bill 743

In 2013, Senate Bill (SB) 743 was passed to amend Sections 65088.1 and 65088.4 of the Government Code, amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of the Public Resources Code (PRC), to add Section 21155.4 to the PRC, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of the PRC, to add and repeal Section 21168.6.6 of the PRC, and to repeal and add Section 21185 of the PRC, relating to environmental quality. In response to SB 743, the Office of Planning and Research (OPR) has updated the CEQA Guidelines to include new transportation-related evaluation metrics. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package along with an updated Technical Advisory related to Evaluating Transportation Impacts in CEQA. Full compliance with the Guidelines became effective July 2020. As a result of SB 743, and Section 15064.3 of the CEQA Guidelines, as discussed in further detail below, local jurisdictions may no longer rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA, and instead a VMT metric should be evaluated.

Technical Advisory on Evaluating Transportation Impacts in CEQA

In December of 2018, the OPR published the Technical Advisory on Evaluation Transportation Impacts in CEQA (Technical Advisory), which is a guidance document to provide advice and recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory is intended to be a resource for the public to use at their discretion, and the OPR does not enforce any part of the recommendations contained therein. The Technical Advisory includes recommendations regarding methodology, screening thresholds, and recommended thresholds per land use type.

Vehicle Miles Traveled-Focused Transportation Impact Study Guide

In May of 2020, Caltrans adopted the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG) to provide direction to lead agencies regarding compliance with SB 743. The TISG replaces the Caltrans' 2002 Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System. The objectives of the TISG are to provide:[5]

a) Guidance in determining when a lead agency for a land use project or plan should analyze possible impacts to the State Highway System, including its users.
b) An update to the Guide for the Preparation of Traffic Impact Studies (Caltrans, 2002) that is consistent with SB 743 and the CEQA Guidelines adopted on December 28, 2018.
c) Guidance for Caltrans land use review that supports state land use goals, state planning priorities, and GHG emission reduction goals.
d) Statewide consistency in identifying land use projects' possible transportation impacts, to the State Highway System, and to identify potential non-capacity increasing mitigation measures.
e) Recommendations for early coordination during the planning phase of a land use project to reduce the time, cost, and/or frequency of preparing a Transportation Impact Study or other indicated analysis.

[5] California Department of Transportation. *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. May 20, 2020.

Caltrans has jurisdiction over State highways. Therefore, Caltrans controls all construction, modification, and maintenance of State highways, and any improvements to such roadways require Caltrans approval.

Local Regulations

Local rules and regulations applicable to the proposed project are discussed below.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to transportation are applicable to the proposed project.

Goal 3.A To provide for the long-range planning and development of the County's roadway system to ensure the safe and efficient movement of people and goods.

Policy 3.A.1 The County shall plan, design, and regulate roadways in accordance with the functional classification system described in Part I of this Policy Document and reflected in the Circulation Plan Diagram.

Policy 3.A.2 Streets and roads shall be dedicated, widened, and constructed according to the roadway design and access standards generally defined in Section I of this Policy Document and, more specifically in community plans, specific plans, and the County's Highway Deficiencies Report (SCR 93). Exceptions to these standards may be considered due to environmental, geographical, historical, or other similar limiting factors. An exception may be permitted only upon determination by the Public Works Director that safe and adequate public access and circulation are preserved.

Policy 3.A.3 The County shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2010), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations. Minimum right-of-way criteria for each class of roadway in the County are specific in Part I of this Policy Document.

Policy 3.A.11 The County shall require an analysis of the effects of traffic from all land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project consistent with Policy 3.A.7. Such improvements may include a fair share of improvements that provide benefits to others.

Policy 3.A.13 The County shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system. Exceptions may be made when new development generates significant public

benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Goal 3.B To promote a safe and efficient mass transit system, including both rail and bus, to reduce congestion, improve the environment, and provide viable non-automotive means of transportation in and through Placer County.

Policy 3.B.1 The County shall work with transit providers to plan and implement additional transit services within and to the County that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

Goal 3.C To maximize the efficient use of transportation facilities so as to: 1) reduce travel demand on the County's roadway system; 2) reduce the amount of investment required in new or expanded facilities; 3) reduce the quantity of emissions of pollutants from automobiles; and 4) increase the energy-efficiency of the transportation system.

Policy 3.C.1 The County shall promote the use of transportation systems management (TSM) programs that divert automobile commute trips to transit, walking, and bicycling.

Policy 3.C.2 The County shall promote the use, by both the public and private sectors, of TSM programs that increase the average occupancy of vehicles.

Policy 3.C.4 During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.8 The CDRA Engineering and Surveying Division and the Department of Public Works shall view all transportation improvements as opportunities to improve safety, access, and mobility for all travelers and recognize cycling, pedestrian, and transit modes as integral elements of the transportation system.

Policy 3.D.11 The County shall work to achieve equality of convenience and choice among all modes of transportation – pedestrian, cycling, transit and motor vehicles, through a balanced and interconnected transportation system.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP Circulation Element related to transportation are applicable to the proposed project.

Goal 2 Transportation facilities shall be sufficient to allow safe, pleasant. and reasonably convenient travel among all areas within the Horseshoe Bar/Penryn Community Plan area.

Goal 3 Safe access shall be provided for all properties within the community plan area.

Policy 1 The number and extent of roadway cuts and fills required in construction, reconstruction, and road maintenance shall be kept to a minimum consistent with standard design practices.

Policy 4 The rights-of-way of roads shall be wide enough to accommodate appropriate road paving, trails, paths and bikeways, drainage, and public utility services.

Policy 8 Capital improvements shall be undertaken in response to buildout of the area. Traffic mitigation fees to fund the CIP described in this Plan shall be required as condition of approval for all land development projects within the Community Plan area. On-site and "frontage" improvements of projects which compromise the CIP shall be required as conditions of approval for all land development projects.

Policy 10 Traffic mitigation fees shall be collected from all land development projects. Fee programs shall be based on potential traffic generation, and shall be collected when building permits are issued.

Policy 11 Roads shall be designed and maintained to encourage safe, alternative forms of transportation that contribute to a rural atmosphere (such as walking and bicycling).

County of Placer Transportation Study Guidelines

The County of Placer Transportation Study Guidelines were published in November 2020. The Guidelines are intended to provide a clear and consistent technical approach to preparing Transportation Studies in Placer County. They establish analysis techniques for transportation studies based on the current state-of-the-practice in transportation planning and engineering.

For example, the Guidelines set forth a number of thresholds for use in analyses within the County, including VMT thresholds per region. The significance thresholds for Western Placer County and recommended VMT metric used to measure VMT are described by land use type. Recommended thresholds for East Placer County (unincorporated areas from Donner Summit to the east, including the Tahoe Basin) were adopted by Placer County on June 22, 2021.

Placer County Transportation Planning Agency

The PCTPA is the State-designated Regional Transportation Planning Agency for Placer County and is responsible for making decisions about the County's transportation system. In addition to developing and adopting the regional transportation plans and strategies, the PCTPA also allocates the local transportation fund and has entered into a Memorandum of Understanding with Caltrans and Sacramento Area Council of Governments (SACOG) to govern federal transportation planning and programming in Placer County. The PCTPA has also been involved in preparation of the following transportation planning documents.

Placer County Regional Bikeway Plan

In June 2018, Placer County adopted the Regional Bikeway Plan 2018 Update (Regional Bikeway Plan). The Regional Bikeway Plan identifies a vision and goals for bicycling, a network of bikeways to connect the County, and supportive programs and practices to encourage bicycling. The vision statement for the Regional Bikeway Plan is to promote safe, convenient, and enjoyable bicycling by establishing a comprehensive system of bikeways that link the communities of Placer County.[6]

The Regional Bikeway Plan develops a regional system of bikeways that connects the six incorporated cities and numerous unincorporated community areas. As shared-use paths are expanded across the County, they will continue to provide scenic recreational routes as well as key longer-distance regional connections.

Placer County Short-Range Transit Plan

In August 2018, the County adopted the Placer County Short-Range Transit Plan (SRTP) for the Placer County Transit program, which serves western Placer County. The SRTP is intended to provide a detailed business plan to guide the Placer County Transit program in establishing service strategies, improvement priorities, and implementation sequencing over the 2018 through 2025 planning period. The SRTP includes a review of demographics and transit needs, a series of surveys and ridership counts conducted for all Placer County Transit services, a review of the effectiveness and efficiency of existing services, analysis of a wide range of transit options, and the results of public input processes. This SRTP plan was prepared jointly with the development of parallel SRTPs for Roseville Transit, Auburn Transit, and the Western Placer Consolidated Transit Service Agency.[7]

Funding Sources/Fee Programs

In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, which requires new development within the County to mitigate impacts to the roadway system by paying traffic impact fees. The fees collected through the program, in addition to other funding sources, make it possible for the County to construct roads and other transportation facilities and improvements needed to accommodate new development. The fee was last updated in August of 2021. The County's fee program and Capital Improvement Program (CIP) are divided into 11 districts. The project site is located in two districts, with 79 percent of the project footprint (including 100 percent of the occupied structures) within the Placer Central Benefit District and 21 percent of the project footprint located in the Newcastle/Horseshoe Bar/Penryn Benefit District. Pursuant to guidance by the Placer County Department of Public Works, the applicable fee district

[6] Placer County. *Placer County Regional Bikeway Plan*. June 29, 2018.
[7] Placer County Transportation Planning Agency. *Placer County Transit Short Range Transit Plan 2018-2025*. August 9, 2018.

is based on the location of construction. Current study area improvements included in the fee program are shown in Table 16-2.

Table 16-2
Placer County CIP Improvements

Street	Location	Description
Auburn-Bowman Benefit District		
Indian Hill Road	Auburn Folsom Road to Newcastle Road	Widen to four lanes
Newcastle/Horseshoe Bar/Penryn Benefit Area		
English Colony Way	At Taylor Road	Traffic Signal
	Sierra College Boulevard to Taylor Road	Realign/widen for shoulders and bike lanes
Newcastle Road	At I-80	Bridge modifications
	Indian Hill Road to Rattlesnake Road	Shoulder widening
Penryn Road	I-80 to King Road	Realign/widen for shoulders and bike lanes
	At Boyington Road/I-80 intersection	Traffic signal/intersection improvements
	At Boulder Creek Road/I-80 intersection	Traffic signal/intersection improvements
	At King Road	Traffic signal/intersection improvements
	At Taylor Road	Traffic signal/intersection improvements
	At I-80	Bridge modifications
Taylor Road	Town of Loomis to plan boundary	Construct bike lanes/shoulders
SR 193	Taylor Road to Gold Hill Road	Shoulder widening
Placer Central Benefit District		
Sierra College Boulevard	English Colony Way to SR 193	Widen to four lanes
SR 193	Gold Hill Road to Sierra College Boulevard	Shoulder widening
	City of Lincoln to Sierra College Boulevard	Widen to four lanes

16.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to transportation and circulation.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, the proposed project would be considered to result in a significant adverse impact on the environment in relation to transportation if the project would result in any of the following:

- Conflict with a program, plan, ordinance, or policy, addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Table 16-3, copied from the Placer County Transportation Study Guidelines, lists the criteria to be applied in assessing transportation-related CEQA impacts. A project would result in significant CEQA impacts if it would trigger any of the listed criteria.

Table 16-3
CEQA Impact Significance Criteria

Analysis	Component	Significance Criteria
Multi-Modal Plan Consistency	Transit Service and Facilities	The project physically disrupts an existing transit service or facility or interferes with implementation of a planned transit service or facility.
		The project results in increased travel time for busses that adversely effects on-time performance.
		The project results in increased transit ridership demands that result in passenger loads that exceed vehicle loading standards.
		The project results in increased potential for safety conflicts involving transit vehicles and other modes of travel.
	Bicycle Facilities	The project physically disrupts an existing bicycle facility or interferes with implementation of a planned bicycle facility.
		The project results in a significant increase in bicyclists on a facility that does not have adequate bicycle facilities, such that conflicts between bicyclists and other travel modes are likely to increase.
	Pedestrian Facilities	The project fails to provide accessible and safe pedestrian connections between buildings and to adjacent streets and transit facilities.
		The project physically disrupts an existing pedestrian facility or interferes with implementation of a planned pedestrian facility.
		The project results in an increased presence of vehicles and/or pedestrians on a facility that does not have adequate pedestrian facilities, such that conflicts between pedestrians and other travel modes are likely to increase.
	General Plan Consistency	The project conflicts or creates inconsistencies with General Plan policies, except an LOS policy.
Hazard & Safety Impact	Roadway Design and Users	The project would create a condition that does not meet current design standards.
		The project would substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections).
		The project introduces incompatible users (e.g., farm equipment) to a roadway or transportation facility not intended for those users.
	State Highway Facilities	The project results in queueing at off-ramps resulting in slow or stopped traffic past the off-ramp gore point.
		Project is determined to negatively affect safety of the State highway facility.

Source: Placer County Transportation Study Guidelines, 2020.

Vehicle Miles Traveled Standard of Significance

On December 1, 2020, with the passage of Resolution 2020-250, the Placer County Board of Supervisors adopted VMT thresholds of significance, screening criteria, and Transportation Study Guidelines for analyzing transportation impacts under CEQA. Table 16-4 summarizes the VMT thresholds of significance for Western Placer County. Based on the table's threshold for determining impact significance associated with Commercial Retail project types, the proposed project would result in a less-than-significant VMT impact if the project would not result in a net increase in total VMT generated in Placer County.

Pedestrian, Bicycle, Transit, and Safety Standards of Significance

With respect to consistency with a program, plan, ordinance, or policy addressing pedestrian, bicycle, or transit facilities, or potential impacts related to traffic safety, Table 16-3, copied from the Placer County Transportation Study Guidelines, lists the criteria to be applied in assessing



such impacts under CEQA. A project would result in significant CEQA impacts if it would trigger any of the listed criteria.

Table 16-4
VMT Thresholds of Significance by Project Type for Western Placer County

Land Use/Project Type	Recommended Metric	Threshold of Significance
Residential	Household or Home-based VMT per Capita	15% Below Unincorporated County Baseline
Commercial Retail	Total VMT	Zero Net Increase
Office Employment	Work VMT per Employee	15% Below Unincorporated County Baseline
Industrial/Agricultural Employment	Work VMT per Employee	
Hotel/Campground	VMT per Room or per Site	

Source: Placer County Transportation Study Guidelines, 2020.

Method of Analysis

The analysis methodology provided in the Transportation Impact Analysis prepared for the proposed project by KD Anderson & Associates, Inc. and reviewed by the County is discussed below.

Project Trip Generation

Vehicular traffic associated with the proposed project would result from the regular daily operation of the proposed winery and grounds, including from activities during harvest, travel by visitors to the winery, including travel for events permitted under the Placer County Wineries and Rural Breweries Ordinance, or as requested by the project proponents.

A total of 12 employees are expected to work on-site on weekdays during most of the year, which would result in the generation of 24 daily trips. During the harvest, the number of employees could increase to 17, generating 34 daily trips.

A total of 50 visitors per day are expected to patronize the proposed project. Assuming 2.5 persons per vehicle, regular visitors would generate 40 daily trips. The accessory restaurant would operate on a reservation-only basis. The restaurant would support events, and the project proponents may close the restaurant to reservation-based dining during Special Events and Agricultural Promotional Events. The extent to which the accessory restaurant generates trips that are not associated with events and wine tasting was estimated based on the trip generation rates presented in the Institute of Transportation (ITE) 11th Edition Trip Generation Manual and is based on the number of seats available. A freestanding “fine dining” restaurant with 32 seats could generate 84 weekday trips and 82 Saturday trips.

Additionally, trucks of various sizes could be used to haul grapes to the site during harvest, to bring glass/cork/boxes to the site, and to transport finished products. At full production, a total of 33 truckloads of grapes are expected annually, which is equivalent to 2.5 deliveries per week over the 13.5-week crush. Over the harvest, another 13 deliveries of fermentation supplies and laboratory testing would occur. Outside of the harvest, a total 77 large truckloads and 13 delivery-truck-sized truckloads would drive to the site, or an average of 2.3 deliveries per week, along with one garbage truck per week.

Table 16-5 presents the project's daily and peak hour trip generation estimates for days without events. As indicated, on days outside of the harvest, the winery could generate 148 to 152 daily trips. The estimates could increase to 164 to 166 daily trips during the harvest.

Table 16-5
Regular Trip Generation Without Events

Description		Trip End Generation							
		Weekday				Saturday			
		Daily	PM Peak Hour (4:00 PM to 6:00 PM)			Daily	Peak Hour (Noon to 2:00 PM)		
			In	Out	Total		In	Out	Total
Non-Harvest									
Regular Operations	Trucks	2	-	-	-	0	-	-	-
	Employees	24	0	8	8	24	-	-	-
	Visitors/Tasting	40	1	4	5	40	2	3	5
	Miscellaneous	2	1	1	2	2	-	-	-
	Subtotal	68	2	13	15	66	2	3	5
	Restaurant	84	6	3	9	82	6	5	11
	Total	**152**	**8**	**16**	**24**	**148**	**8**	**8**	**16**
During Harvest									
Regular Operations	Trucks	2	0	0	0	2	1	1	2
	Employees	34	0	12	12	34	-	-	-
	Visitors/Tasting	40	1	4	5	40	2	3	5
	Miscellaneous	6	1	1	2	6	1	1	2
	Subtotal	82	2	17	19	82	4	5	9
	Restaurant	84	6	3	9	82	6	5	11
	Total	**166**	**8**	**20**	**28**	**164**	**10**	**10**	**20**

Source: KD Anderson & Associates, Inc., 2022.

Additionally, as part of the Transportation Impact Analysis, the amount of vehicle traffic associated with events at the proposed project was estimated based on assumptions made for the Placer County Winery and Farm Brewery Zoning Text Amendment EIR (WFB Zoning Text Amendment EIR), which included attendance estimates, automobile occupancy, and assumptions as to the time of day that events may occur.[8] Resulting trip generation estimates were then annualized based on the number of times each event was reasonably anticipated to occur each year. The extent to which the trip generation assumptions for events at the proposed project differ from those made for the WFB Zoning Text Amendment EIR was considered with respect to the following factors:

1. The project would increase the maximum permitted attendance for agricultural promotional events from 50 to 75 people. The change increased the trip generation estimate, and the trip generation formula was adjusted accordingly;
2. The project anticipates being open seven days a week. Such hours of operation would exceed typical County winery operating hours, which are commonly Friday to Sunday;
3. The County's Wine and Farm Brewery Ordinance does not limit the number of agricultural promotional events. As such, a total of 208 agricultural promotional events plus 12 annual special events are reasonably anticipated, which is consistent with the WFB Zoning Amendment EIR assumptions; and

[8] Placer County. *Winery and Farm Brewery Zoning Text Amendment Project EIR*. Certified June 23, 2020.

4. The WFB Zoning Text Amendment EIR analysis did not assume that wineries would need extra staff for special events. The project description notes that extra staff would be needed. Thus, five additional staff were assumed.

With respect to trips associated with the proposed events, the Transportation Impact Analysis notes that the calculation of such trips includes a derivation of weighted average as a redline to the assumptions contained in the WFB Zoning Amendment EIR. As detailed in Table 16-7, the Transportation Impact Analysis determined that the overall weighted average trips from primary events associated with project operation (i.e., regular agricultural promo events, rolling agricultural promo events, and special events), in combination with the average rate of secondary regular agricultural events, would result in 140 average daily trips on both weekdays and Saturdays, with the PM peak hour on weekdays and the afternoon peak hour on Saturdays each resulting in 40 trips.

Table 16-6 presents the sum of trips associated with regular project operations and annual events. The estimate includes the ITE trip generation for the restaurant use and annual events trip generation to account for special events. The estimate is conservative, as accessory restaurant use and special events may not normally occur on the same day.

Table 16-6
Composite Trip Generation Estimate

Description	Weekday				Saturday			
		PM Peak Hour (4:00 PM to 6:00 PM)				Peak Hour (Noon to 2:00 PM)		
	Daily	In	Out	Total	Daily	In	Out	Total
Non-Harvest – With Annual Events								
Regular Operations	68	2	13	15	66	2	3	5
Restaurant	84	6	3	9	82	6	5	11
Average Annual Events	140	20	20	40	140	38	2	40
Total	**292**	**28**	**36**	**64**	**288**	**46**	**10**	**56**
During Harvest – With Annual Events								
Operations	82	2	17	19	82	4	5	9
Restaurant	84	6	3	9	82	6	5	11
Average Annual Events	140	20	20	40	140	38	2	40
Total	**306**	**28**	**40**	**68**	**304**	**48**	**12**	**60**

Source: KD Anderson & Associates, Inc., 2022.

As shown in the table, the trip generation forecasts for days outside of harvest range from 288 to 292 daily trips, and from 304 to 306 daily trips during harvest. The total trip generation forecast in Table 16-6 represents the "worst case" conditions on days when events occur assuming the accessory restaurant is operating as a "free standing" use. Because other days would occur throughout the year when the proposed winery does not host events, or days when the restaurant would only be supporting events and not generating its own trips, the composite estimate does not represent the overall "average" condition through the year, as is applicable to VMT impact screening.

Table 16-7
Annual Weighted Average Event Trip Generation Rates/Forecasts

Description	Quantity (Persons)	Number of Annual Events	Frequency		Trips per Total Allowed Events							
					Weekday				Saturday			
					Average Daily	PM Peak Hour			Average Daily	Afternoon Peak Hour		
						In	Out	Total		In	Out	Total
Regular Ag Promo Event	75	95[1]	95/115	Average Rate	60	8	7	15	60	15	0	15
			82.6%	Weighted	49.6	6.6	5.8	12.4	49.6	12.4	0	12.4
Rolling Ag Promo Event	75	8[1]	8/115	Average Rate	180	30	30	60	180	30	30	60
			7.0%	Weighted	12.6	2.1	2.1	4.2	12.6	2.1	2.1	4.2
Special Event	200	12	12/115	Average Rate	160	40	40	80	160	80	0	80
	5 Employees				10	0	0	0	10	0	0	0
			10.4%	Weighted	17.7	4.1	4.2	8.3	17.7	8.3	0	8.3
Weighted Average Per Primary Event		115[1]	100%		79.9	12.8	12.1	24.9	79.9	22.8	2.1	24.9
Regular Ag Promo Event – Secondary	75	105	100%	Average Rate	60	7	8	15	60	15	0	15
Overall Trip Generation for Events (Sum of Weighted Events and 2nd Ag Promo Event)					**140**	**20**	**20**	**40**	**140**	**38**	**2**	**40**

[1] Sum of regular ag promotional events is 95+8 +105 = 208.

Source: KD Anderson & Associates, Inc., 2022.

Project Trip Assignment

The assignment of project traffic to the local area road system reflects the alternative routes available between the project site and eventual trip destinations and the travel time along each route. Figure 16-3 presents "project only" weekday daily trips during harvest, while Figure 16-4 presents similar information for peak hour conditions at the study intersections.

The annual average daily trip generation is shown in Table 16-8 and is based on the number of days per year that each operation or activity would occur. As shown in the table, the proposed project could generate a total of 67,728 trips annually from all activities. Spread across 365 days, the annual average daily trip generation is estimated to be 185.6 daily vehicle trips.

Table 16-8
Annual Average Daily Trip Generation

Operation / Activity	Harvest	Day	Annual Days	Trips per Day	Total Annual Trips
Regular Operations	No	Weekday	200[1]	68	13,600
	No	Weekend	80[2]	66	5,280
	Yes	Weekday	60[3]	82	4,920
	Yes	Weekend	24[4]	82	1,968
Restaurant – Lunch/Dinner	Both	All	320[5]	83[6]	26,560
Average Annual Events			110[7]	140	15,400
Total			**365**	**185.6**	**67,728**

[1] 40 non-harvest weeks times five weekdays per week.
[2] 40 non-harvest weeks times two weekend days per week.
[3] 12 harvest weeks times five weekdays per week.
[4] 12 harvest weeks times two weekend days per week.
[5] Assumes the restaurant is open on 265 "non-event" days and half of the 110 event days, or 320 days annually.
[6] Weighted average of five weekdays and two weekend days at the Saturday rate.
[7] 220 events assuming two per day is 110 annual event days.

Source: KD Anderson & Associates, Inc., 2022.

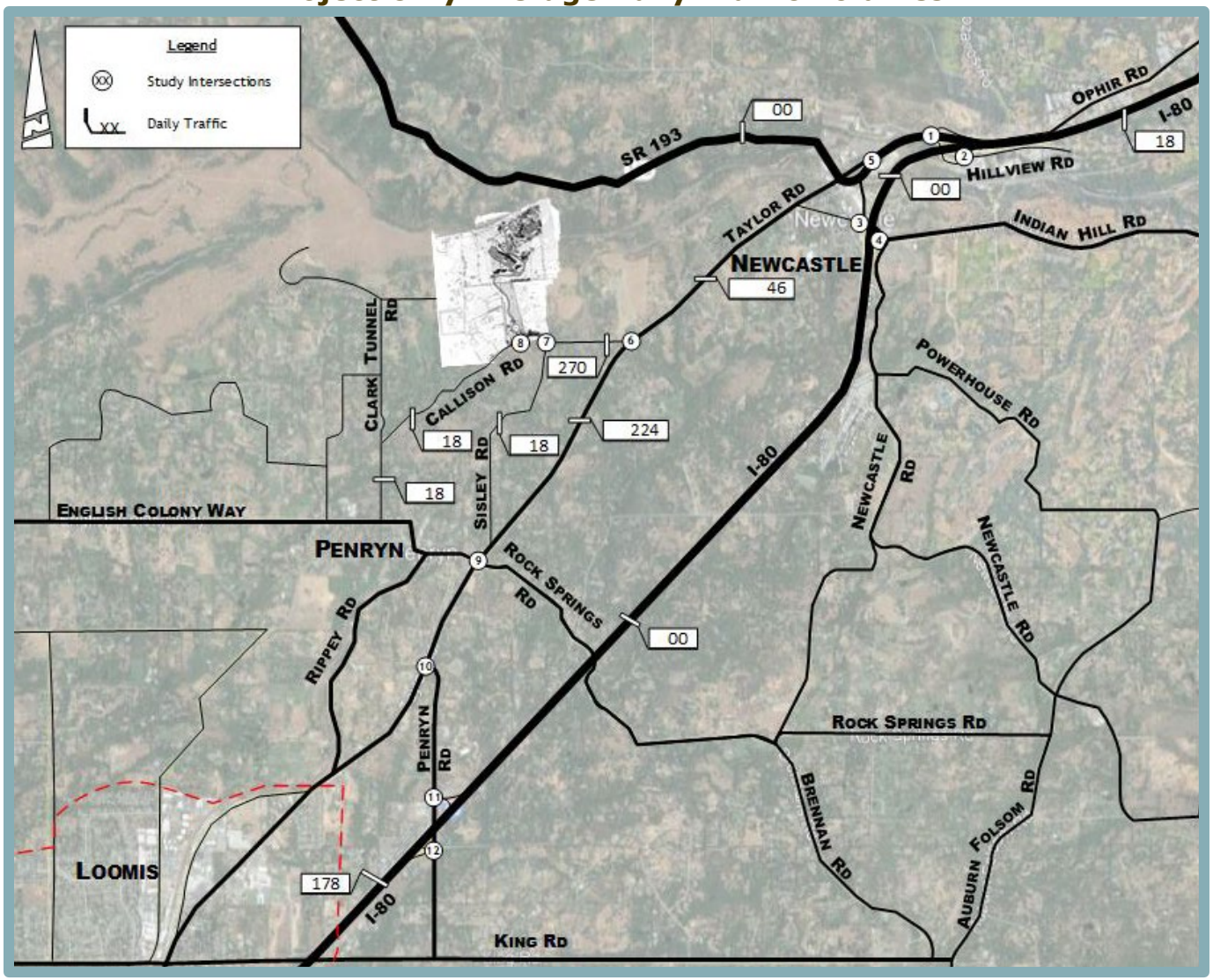
Project Vehicle Miles Traveled

The Placer County Transportation Study Guidelines present direction for assessing VMT impacts for land development projects within Placer County in compliance with CEQA Guidelines Section 15064.3. The County guidelines address several aspects of VMT impact analysis and include screening criteria, which are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study. Projects meeting at least one of the screening criteria can be presumed to have a less-than-significant VMT impact, absent substantial evidence that the project would lead to a significant impact.

The proposed project does not meet any of the County's screening criteria.[9] Therefore, consistent with the VMT thresholds of significance shown in Table 16-4, the evaluation of potential VMT impacts associated with the project in the Transportation Impact Analysis is based on if the project would result in a net increase in total VMT generated in Placer County.

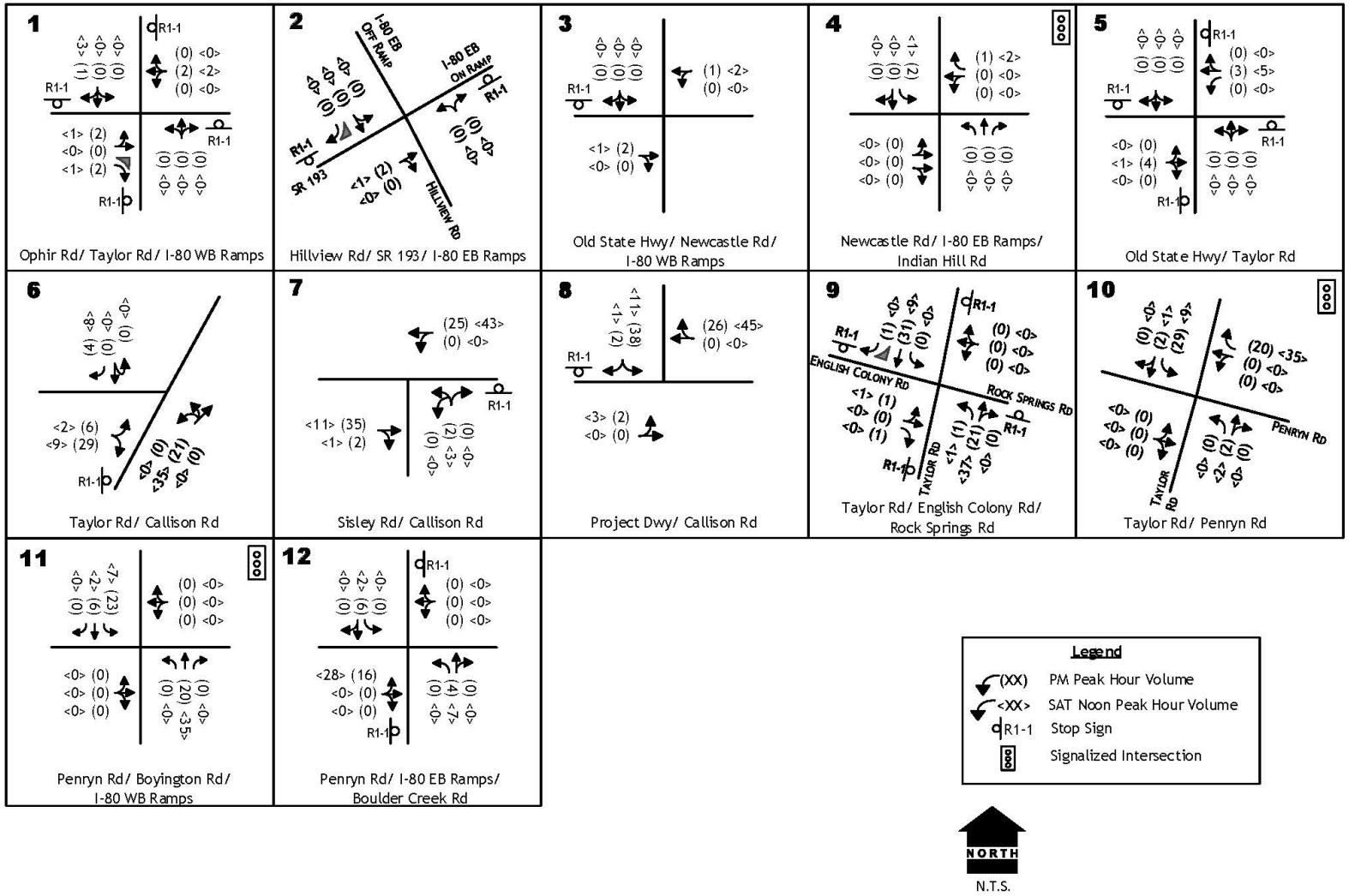
[9] For example, Placer County Transportation Study Guidelines include a screening criterion for "small projects", defined as a project that generates 110 or fewer average daily trips or less than 880 VMT on a typical day. The proposed project is estimated to generate 185.6 average annual daily trips, thus, exceeding this screening criterion.

Figure 16-3
Project Only Average Daily Traffic Volumes



Source: KD Anderson & Associates, Inc., 2022.

Figure 16-4
Project Only Traffic Volumes and Lane Configurations



Source: KD Anderson & Associates, Inc., 2022.

The Placer County Transportation Study Guidelines suggest that a regional travel demand forecasting model can be the applicable tool for quantifying a project average daily VMT. However, as previously discussed, review of the SACOG SACSIM model employed under County guidelines indicates that wineries are not a land use that can be represented in the travel demand model. Thus, the Transportation Impact Analysis selected an alternative approach through consultation with Placer County staff. The analysis employed technology developed by StreetLight Data, which is based on Geographic Information System (GIS) cell phone data. StreetLight Data information has been used extensively over the last few years by traffic engineers to identify roadway traffic volumes when the effects of COVID-19 made traditional traffic counts unrepresentative of "regular" conditions. KD Anderson & Associates, Inc. conducted the following steps to complete the project VMT estimate:

- Identified Placer County wineries where geographical conditions made it possible to collect StreetLight Data information;
- Reviewed a list of wineries outside of Placer County similar to the proposed project to identify locations where StreetLight Data information could be collected;
- Used StreetLight Data information to identify the 2019 annual average daily VMT and average trip length for the wineries; and
- Applied the average trip length from similar wineries to the proposed project's average annual daily trip generation estimate to determine the project's average daily VMT.

In addition to those Placer County wineries assessed for VMT purposes (see Table 16-1), KD Anderson also evaluated VMT characteristics associated with five other California wineries that are reasonably believed to be similar to the operational characteristics of the proposed project. Table 16-9 presents the five similar wineries and their associated relevant data. In each case the total annual VMT addresses all travel to and from the winery, including trips by employees, guests, and deliveries. As indicated the average trip length for those five locations ranged from 12.14 miles to 16.49 miles, and the average was 13.80 miles. For the VMT analysis in the Transportation Impact Analysis, the daily trips generated by the proposed project are assumed to have an average trip length 13.80 miles, which is the identified average for similar wineries elsewhere presented in Table 16-9. The assumption is conservative, given that the project site is located closer to major population centers to the west than other Placer County wineries.

Table 16-9
Average Trip Length for Representative California Wineries

Parameter	Wineries Outside Placer County				
	Avonsole	Mount Palomar	Palmaz	Davis Estates	Naggier Winery
Location	**Temecula**	**Temecula**	**Napa**	**Calistoga**	**Grass Valley**
Characteristics					
Events Offered	Yes	Yes	Yes	Yes	Yes
Restaurant	Yes	Yes	No	No	No
Full Liquor License	Yes	Yes	No	No	No
Tasting Days Open	Daily	Daily	Res	Daily	F Sa Su
Food Days Open	M, Th, F, Sa, Su	W, Th, F, Sa, Su	N/A	N/A	N/A
VMT and Average Trip Length					
Annual Average Daily VMT	6,228	4,794	1,488	1,421	1.486
Average Trip Length	12.79	15.46	13.05	12.14	12.14

Source: KD Anderson & Associates, Inc., 2022.

To place these estimates in perspective, the distance from the Placer County winery with the longest average trip length, Vina Castellano, to the Auburn City Hall is 6.4 miles, to the Roseville City Hall is 22.3 miles and to the Sacramento City Hall is 39.0 miles. The distance from Lone Buffalo, the Placer County winery with the shortest average distance, is 5.9 miles to Auburn City Hall, 17.5 miles to the Roseville City Hall and 34.8 miles to Sacramento's City Hall, as shown in Table 16-10.

Table 16-10
Comparable Travel Distances

Destination	Lowest Average Trip Length Lone Buffalo	Highest Average Trip Length Vina Castellano	Project Site
Auburn City Hall	5.9	6.4	5.5
Roseville City Hall	17.5	22.3	12.1
Sacramento City Hall	34.8	39.0	28.0

Source: KD Anderson & Associates, Inc., 2022.

Project-Specific Impacts and Mitigation Measures

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation to reduce the identified impacts, if needed. In the case of traffic operations, specifically intersection and roadway level of service, such an analysis is not required pursuant to CEQA Guidelines Section 15064.3(a) since congestion and intersection operations no longer constitute a transportation impact under CEQA. Placer County staff will separately review LOS for the project's consistency with General Plan policies.

16-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction activities associated with the proposed project would include use of construction equipment, including vehicles performing cut and fill activities, bulldozers, and other heavy machinery, as well as building materials delivery, and construction worker commutes. The transport of heavy construction equipment to the site, haul truck trips, and construction worker commutes could affect the local roadway network. Construction workers typically arrive before the morning peak hour and leave before the evening peak hours of the traditional commute time periods. Deliveries of building material (lumber, concrete, asphalt, etc.) would also normally occur outside of the traditional commute time periods. In addition, any truck traffic to the site would follow designated truck routes, and project construction would likely stage any large vehicles (i.e., earth-moving equipment, cranes, etc.) on-site prior to beginning site work and remove such vehicles at project completion. However, detailed information related to the construction schedule during site development, or a construction management plan, is not available. As a result, construction activities could include disruptions to the transportation network near the project site.

In addition to the construction of structures and internal roadways, pursuant to County requirements, the proposed project would reconstruct approximately 500 feet of Callison

Road at the project site entrance to create two 12-foot-wide travel lanes and four-foot shoulders on each side of the road (see Figure 3-8 in the Project Description chapter of this EIR). Additionally, the portion of Callison Road directly in front of the main entrance to the project site would be raised approximately three feet to be consistent with the County's required sight distance standard (see Section H in Figure 3-9 in the Project Description chapter). The construction of the foregoing improvements would directly influence the transportation network near the site during project construction, and could result in roadway or lane closures that adversely affect residents in the project area.

Without proper planning of construction activities, construction traffic could interfere with existing roadway operations during the construction phase, which could result in a risk to public safety. Therefore, project traffic associated with construction activities could result in a ***significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

16-1 *Prior to the commencement of construction, a construction signage and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signing and traffic control plan shall include (but not be limited to) items such as:*

- *Guidance on the number and size of trucks per day entering and leaving the project site;*
- *Identification of arrival/departure times that would minimize traffic impacts;*
- *Approved truck circulation patterns;*
- *Locations of staging areas;*
- *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;*
- *Methods for partial/complete street closures (e.g., timing, signage, location, and duration restrictions);*
- *Criteria for use of flaggers and other traffic controls;*
- *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;*
- *Monitoring for roadbed damage and timing for completing repairs;*
- *Limitations on construction activity during peak/holiday weekends and special events;*
- *Preservation of emergency vehicle access;*
- *Coordination of construction activities with construction of other projects that occur concurrently in the HBPCP/unincorporated County to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);*
- *Removing traffic obstructions during emergency evacuation events; and*

- *Providing a point of contact for nearby residents to obtain construction information, have questions answered, and convey complaints.*

The construction signage and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.

- *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant.*
- *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*

16-2 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations. Based on the analysis below, the impact is *less than significant*.

The following discussion evaluates whether the proposed project would result in impacts to existing or planned pedestrian facilities, bicycle facilities, or transit facilities and services within the project area.

Pedestrian System

As part of the proposed widening of Callison Road to 32 feet to meet County requirements at the project site entrance, the proposed project would include the addition of four-foot-wide shoulders along each side of Callison Road. Based on the rural location of the project site, the proposed project is unlikely to generate appreciable pedestrian activity by guests. While the possibility remains that an employee of the proposed winery could elect to walk to the Taylor Road/English Colony Way transit stop that is 1.25 miles from the project site along Sisley Road, the SACOG 2015 Regional Bicycle, Pedestrian and Trails Master Plan indicates that 1.6 percent of Placer County work-related commuters walked to work.[10] Thus, if two percent of the project's employee trips were made on foot, then one daily pedestrian might be added to the area circulation system.

Apart from Callison Road, Sisley Road would serve as the other primary road pedestrians could use to access the project site. As discussed in the Existing Environmental Setting section of this chapter, Sisley Road is a local rural road that extends north from Taylor Road near the Taylor Road/English Colony Way intersection for about 1.1 miles to Callison Road near the UPRR crossing. The road does not currently include sidewalks. Any pedestrians proceeding along Sisley Road either walk on unimproved shoulders or mix with automobiles on the travel way. While the pavement width of Sisley Road ranges from 16 to 22 feet and several horizontal curves are located along the road, at the relatively low traffic volume levels anticipated to be generated by the proposed project, conflicts

[10] Sacramento Area Council of Governments. *Regional Bicycle, Pedestrian, and Trails Master Plan* [pg. 59]. April 16, 2015.

between motor vehicles and pedestrians on Sisley Road would unlikely increase (see Table 16-6 and Table 16-8). In addition, the proposed project would not physically disrupt an existing pedestrian facility, nor interfere with implementation of a planned pedestrian facility. The project would not result in an increased number of vehicles and/or pedestrians on a facility that does not have adequate pedestrian facilities, such that conflicts between pedestrians and other travel modes would likely increase. As such, implementation of the proposed project would not adversely affect pedestrian facilities.

Bicycle Facilities

Due to the rural nature of the project site and Callison Road, the road is not heavily used by recreational bicyclists. However, the possibility remains that future guests of the proposed project could choose to ride bicycles to the project site. Similarly, employees of the proposed winery could also commute to the site by bicycle. According to the SACOG 2015 Regional Bicycle, Pedestrian and Trails Master Plan, approximately 1.8 percent of Placer County commuters reported using bicycles to travel to work.[11] Thus, if two percent of the project's employees elected to ride a bicycle, then one additional daily bicycle trip could be added to the area circulation system by commute activity.

Sisley Road, which ranges in width from 16 to 22 feet, does not currently provide shoulders, and any bicyclists traveling on the road currently mix with automobiles along the road's travel lanes. Bicyclists similarly mix with automobiles traveling on Callison Road, which ranges from 16 feet to 24 and does not contain shoulders. Several horizontal curves are located along each road. However, at the relatively low traffic volume levels anticipated to be generated by the proposed project, conflicts between motor vehicles and bicyclists would be unlikely to increase (see Table 16-6 and Table 16-8). Furthermore, by designing and constructing project improvements along the 500-foot segment of Callison road in accordance with Placer County standards, the project would not physically disrupt an existing bicycle facility or interfere with implementation of any planned facility. With the presence of bikes lanes on Taylor Road, a continuous bicycle network is available in the project vicinity along more heavily traveled roads for any bicyclist who travels to the project site. Overall, the proposed project would not result in a significant increase in bicyclists on a facility that does not have adequate bicycle facilities, such that conflicts between bicyclists and other travel modes would be likely to increase. As such, implementation of the proposed project would not adversely affect bicycle facilities.

Transit System

Fixed-route transit service currently operates along Taylor Road in the project vicinity. However, the project's traffic contribution to roads near the Taylor Road/English Colony Way transit stop would be too slight to result in an increased travel time for buses that could adversely effect on-time performance (see Table 16-6 and Table 16-8). As such, the proposed project would not physically disrupt the Taylor Road transit service, nor any other existing transit service or facility in the project vicinity. Additionally, development of the proposed project would not interfere with implementation of a planned transit service or facility. While an employee could choose to use the transit service, the project would not result in increased transit ridership demand that would result in passenger loads in excess of applicable vehicle loading standards. Finally, as the project access is not adjacent to any transit facility, the project would not result in increased potential for safety

[11] Sacramento Area Council of Governments. *Regional Bicycle, Pedestrian, and Trails Master Plan*. [pg. 59]. April 16, 2015.

conflicts involving transit vehicles and other modes of travel. As such, implementation of the proposed project would not adversely affect transit service and/or facilities.

Conclusion

Based on the above, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (i.e., bus turnouts, bicycle lanes, bicycle racks, public transit, pedestrian facilities, etc.). Thus, the project would result in a ***less-than-significant*** impact to pedestrian, bicycle, and transit facilities.

Mitigation Measure(s)

None required.

16-3 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Regional access to the project site by way of State highways would primarily be provided through the I-80/Penryn Road interchange. Under the CEQA Guidelines, a project's effects on safety of Caltrans facilities would be considered a significance criterion. Queues that extend along off-ramps to the point of interference with the flow of traffic on I-80 would represent a significant safety impact, as would queues that exceed available storage in turn lanes, spilling over into through travel lanes.

Table 16-11 and Table 16-12 show Existing and Existing Plus Project 95th percentile queues at study area intersections and compare those queues to available storage during the weekday PM peak hour and Saturday peak hour, respectively. In the case of freeway off-ramps, storage is defined as the distance along the ramp to the point where ramp and mainline travel lanes diverge.

As indicated in the tables, the addition of project trips would not result in any queue extending towards the end of an off-ramp and interfering with the flow of mainline I-80 traffic, nor would the addition of project trips result in the queue of traffic to exceed the available storage in the westbound left-turn lane at the Old State Highway (SR 193)/Taylor Road intersection.

Based on the Existing Plus Project 95th percentile ramp queues presented above, traffic generated by the proposed project would not negatively affect the safety of the State highway facility. In addition, it should be noted that improvements to the above facilities are identified in Placer County's Newcastle/Horseshoe Bar/Penryn Benefit District CIP fee program and the project would contribute a fair share to the costs of future improvements by paying adopted CIP development impact fees.

In addition, as previously discussed, the proposed project would reconstruct approximately 500 feet of Callison Road at the project site entrance and would raise the portion of the road directly in front of the site entrance by approximately three feet.

Table 16-11
Existing Plus Project 95th Percentile Ramp Queues at I-80 Interchange – Weekday PM Peak Hour

Intersection	Storage (feet)	Existing		Existing Plus Project	
		Volume (vph)[1]	Queue (feet)	Volume (vph)[1]	Queue (feet)
Ophir Road/I-80 WB Ramps	1,140	299	85	301	85
SR 193/I-80 EB Ramps	480	167	<25	167	<25
Newcastle Road/I-80 WB Ramps	610	144	50	144	50
Newcastle Road/I-80 EB Ramps EB Left-Turn/Thru Lane	800	182	200	182	200
Newcastle Road/I-80 EB Ramps EB Thru/Right-Turn Lane	800	183	200	183	200
Old State Highway (SR 193)/Taylor Road WB Left-Turn Lane	270	265	65	265	65
Penryn Road/I-80 WB Ramps	785	163	170	163	175
Penryn Road/I-80 EB Ramps	750	388	145	404	170

[1] Vehicles per hour.

Source: KD Anderson & Associates, Inc., 2022.

Table 16-12
Existing Plus Project 95th Percentile Ramp Queues at I-80 Interchange – Saturday Peak Hour

Intersection	Storage (feet)	Existing		Existing Plus Project	
		Volume (vph)[1]	Queue (feet)	Volume (vph)[1]	Queue (feet)
Ophir Road/I-80 WB Ramps	1,140	249	55	251	60
SR 193/I-80 EB Ramps	480	110	<25	110	<25
Newcastle Road/I-80 WB Ramps	610	134	50	134	50
Newcastle Road/I-80 EB Ramps EB Left-Turn/Thru Lane	800	151	140	151	140
Newcastle Road/I-80 EB Ramps EB Thru/Right-Turn Lane	800	152	140	152	140
Old State Highway (SR 193)/Taylor Road WB Left-Turn Lane	270	164	30	164	30
Penryn Road/I-80 WB Ramps	785	126	125	126	130
Penryn Road/I-80 EB Ramps	750	338	90	366	115

[1] Vehicles per hour.

Source: KD Anderson & Associates, Inc., 2022.

The proposed improvements at the site entrance from Callison Road would comply with Placer County Engineering Design Plate 116 Major for the design of rural road encroachments, including construction of acceleration and deceleration tapers with lengths that are commensurate with the design speed of Callison Road. The new site entrance would be constructed at a location that allows exiting traffic to have views in each direction.

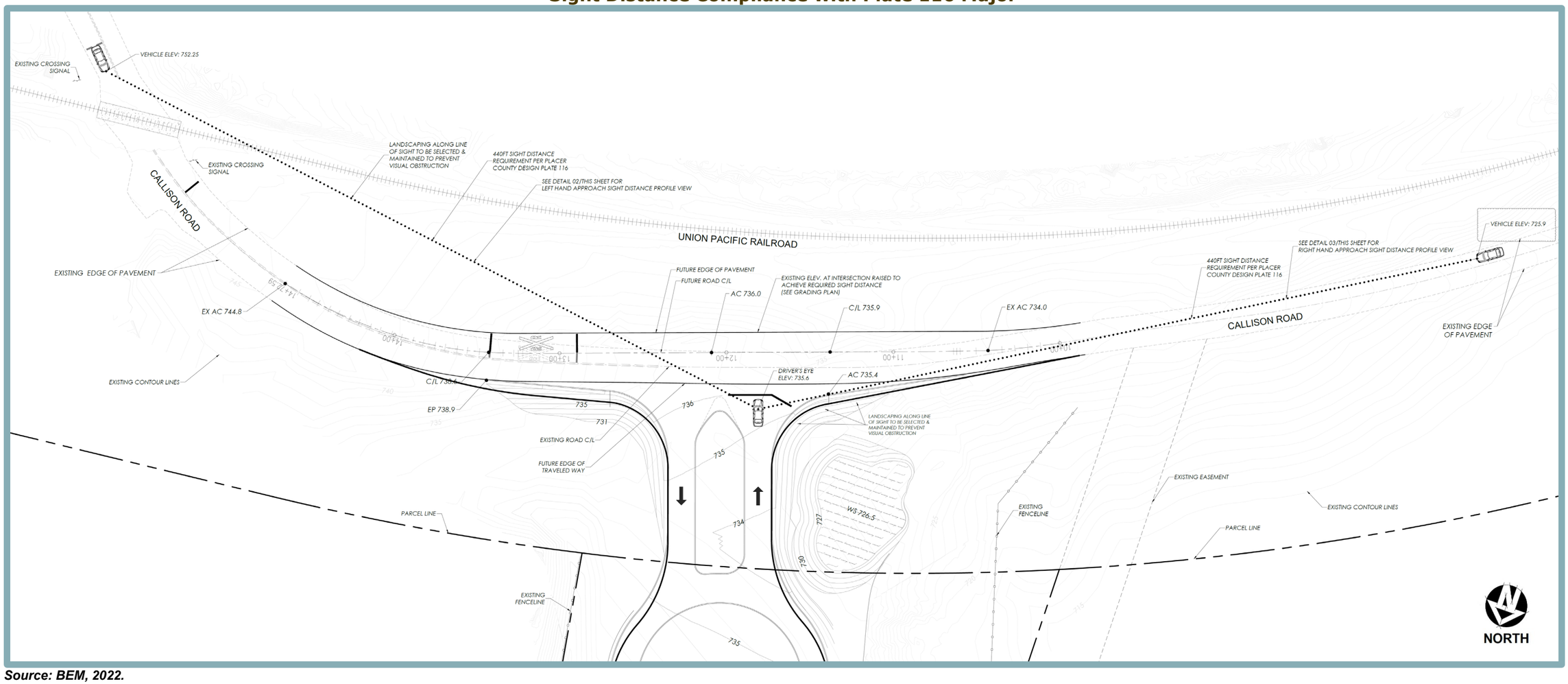
Placer County typically evaluates sight distance for speeds that are the greater of the posted speed limit and the observed 85th percentile speed. As previously discussed, Callison Road does not have a posted speed limit. In accordance with the California Vehicle Code, a 55 mph speed limit is applied, and the design speed has been determined by the County to be 40 mph. At 40 mph, Plate 116 Major requires 440 feet of sight distance from a location measured 15 feet from the edge of the travel way.

As shown in Figure 16-5, views looking west from the site access would satisfy the Plate 116's 440-foot requirement. Because the alignment of Callison Road curves as the road approaches the UPRR crossing, the view along the 440-foot sightline required by Plate 116 would extend across the inside of the road curve and just beyond the railroad tracks. To meet Plate 116 requirements, the landscaping in the area would need to be planned and maintained to not exceed the lines of sight in either direction, which would be coordinated with the County.

With respect to approach tapers along Callison Road, Plate 116 Major also requires that rural roads be developed with approach tapers that provide space for turning motorists to decelerate outside the flow of through traffic and to accommodate the turning requirements of trucks and vehicles pulling trailers. Plate 116 guidelines for a 40-mph design speed require 40-foot radius curve returns and 150-foot-long approach tapers in advance of the returns in each direction. The foregoing feature is included in the acceleration taper to the west of the site access. Additionally, although the deceleration taper to the east of the access could be limited by the adjoining curve, the maximum feasible taper length would be provided and would likely be a minimum of 108 feet, which exceeds the taper length for a 35-mph design speed. The speed of vehicles at the location is not likely to be 40 mph, due to the presence of the curve. As such, the County's standard would be met. In addition, the final encroachment design would be reviewed during the County's improvement plan process, ensuring that the proposed approach tapers along Callison Road comply with Plate 116 Major. Based on the above, the proposed improvements at the sight entrance from Callison Road would be designed in accordance with applicable County standards, and potential vehicle safety impacts related to sight distance and approach tapers would be less than significant.

Placer County has evaluated the need for left-turn lanes on rural roads as part of consideration of many other development proposals. Factors such as the frequency of volumes reaching warrants levels, the availability of adequate sight distance and the nature of motorists attracted to the site are considered. In this case, although sight distance is adequate, a left-turn lane would be desirable at the Taylor Road/Callison Road intersection, because many motorists visiting the Project 8 Winery may be unfamiliar with the local road system and the projected Cumulative plus Project traffic volumes satisfy AASHTO guidelines (2011 and 2018).

Figure 16-5
Sight Distance Compliance with Plate 116 Major



Source: BEM, 2022.

The extent to which an all-way stop control at Taylor Road/Callison Road is a possible alternative was considered. Review of project volumes indicated that an all-way stop would deliver LOS meeting the minimum Placer County standard during the PM and Saturday peak hour. However, review of the Manual on Uniform Traffic Control Devices (MUTCD) warrants for an all-way stop under these conditions indicated that projected traffic volumes would fall below the level that would satisfy warrants. Specifically, the volume on the Callison Road approach would not satisfy the requirement for 140 vehicles of all types over each of eight hours.

While Existing Plus Project traffic volumes fall below the level that satisfies AASHTO 2011 requirements for a left-turn lane at the Taylor Road/Callison Road intersection, the Existing Plus Project traffic volumes would satisfy the 2018 AASHTO guidelines. Safety conflicts could increase between eastbound Taylor Road traffic and vehicles waiting to turn left onto Callison Road as a result of project traffic and background traffic growth. More specifically, safety hazards could occur if eastbound traffic on Taylor Road fails to perceive waiting vehicles at the Taylor Road/Callison Road intersection in time to stop, or if eastbound motorists attempt to pass a turning vehicle on the right. Such potential conflicts could be mitigated by constructing a left-turn lane designed in accordance with applicable Placer County standards, as shown in Figure 16-6. As a result, the proposed project shall be required to construct a left-turn lane at the Taylor Road/Callison Road intersection. Given that this improvement does not satisfy both 2011 and 2018 AASHTO requirements based on Existing Plus Project volumes, the County has agreed to allow the applicant to construct the left-turn lane prior to Phase 2 of the project, rather than Phase 1, as shown in Mitigation Measure 16-3.

Based on the above, without incorporation of a left-turn lane at the project egress designed in accordance with applicable Placer County standards, the proposed project could substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level. Construction of the left-turn lane at Taylor Road/Callison Road would occur within the County's existing right-of-way and could be accomplished within the portion of the right-of-way that is currently graveled, thus ensuring that no impacts to sensitive habitats would occur (see Figure 16-6).

16-3 *Prior to the approval of improvement plans for Phase 2 of the Project or within three years of occupancy of Phase 1, whichever occurs first, the project applicant shall install a left-turn lane on Taylor Road at the Callison Road intersection to the satisfaction of the Placer County Department of Public Works.*

Figure 16-6
Project 8 Winery Taylor Road/Callison Road Left-Turn Lane Improvement Exhibit



Source: BEM, 2022.

16-4 Result in inadequate emergency access or access to nearby uses. Based on the analysis below, the impact is *less than significant*.

Several factors determine whether a project has sufficient access for emergency vehicles, including the following:

1. Number of access points (both public and emergency access only);
2. Width of access points; and
3. Width of internal roadways.

As discussed above, the proposed project would include a single primary access point on Callison Road. The on-site private driveway would include a minimum 100-foot diameter roundabout after the main entry from Callison Road, which would lead to a gated entry. The proposed gated access point would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code. The driveway would provide access to the processing/warehouse building, and then continue to the octagon building where an additional roundabout would be provided to allow a directional change for larger vehicles. The width of the private driveway would be able to accommodate emergency vehicles and would be sufficient to provide emergency services to the proposed project, as confirmed by the Fire District.[12]

Based on the above, the proposed project would not result in inadequate emergency access or access to nearby uses, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

16-5 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Based on the analysis below and with implementation of mitigation, the impact is *significant and unavoidable*.

In accordance with the Placer County VMT thresholds shown in Table 16-4, Commercial Retail projects result in a significant VMT impact if they would result in a net increase in total VMT. Table 16-13 summarizes the results of the VMT analysis prepared for the proposed project.

Table 16-13
Project 8 Winery VMT

Area	AADT	Average Trip Length	Total Daily VMT	Percent Increase in Total Regional VMT
Project Site	185.6	13.80	2,561	-
Placer County	-		10,025,561[1]	0.026%

[1] Placer County 2040 Regional Transportation Plan, Table 6.1-4.

Source: Source: KD Anderson & Associates, Inc., 2022.

[12] Mark D'Ambrogi, Fire Marshal, Penryn Fire Protection District, email correspondence with Evan MacKenzie, Engineering Manager, BEM, May 16, 2022.

As previously discussed, the daily trips generated by the proposed project are assumed to be the average of the average trip length for the representative wineries shown in Table 16-9. The assumption is conservative, considering that the project site is located closer to major population centers to the west than other Placer County wineries. Additionally, the assumption is conservative because it ignores the likelihood of a reduction of trips made by residents of Placer County to predominant wine making regions outside of the County resulting in a reduced impact to Countywide VMT. Applying the average trip length of the representative wineries to the project's 185.6 average annual daily trip forecast yields an estimate of 2,561 daily VMT.

As shown in the table, the proposed project would increase total regional VMT by 0.026 percent. Because the proposed project would result in a net increase in total VMT, a significant impact could occur. Under County guidelines, if a project would result in a significant VMT impact, the project must implement mitigation measures that would reduce the project's VMT to the extent feasible. Typically, VMT is reduced by implementing strategies that achieve one of the following:

- Reducing the number of automobile trips generated by the project (i.e., trip generation); and/or
- Reducing the distance that people drive (i.e., trip length).

Table 4 of the Placer County Transportation Study Guidelines lists potential mitigation measures for all types of uses, not all of which may be applicable to any individual project. The examples include project changes (i.e., locating the project in an area of the region that already exhibits low VMT, increasing project density, etc.), parking (i.e., limiting parking supply), transit (i.e., improve or increase access to transit, provide partially or fully funded transit passes, etc.), and other measures.

Feasible mitigation measures for the project-related VMT impact are limited. Most mitigation measures that reduce VMT have low to negligible effects in rural areas, such as bike lanes, transit network improvements, and pedestrian networks. Other mitigation measures are not applicable, such as diversification or intensification of land uses on the project site. Potential mitigation measures could include:

1. Guest Carpooling Incentives: Carpooling by guests by offering an incentive to guests who arrive with four or more persons in a vehicle;
2. Event Guest Shuttle Service: Shuttle service during large events with specific guest origins from a satellite parking location such as the park-and-ride facilities on I-80 or South Placer County area hotels;
3. Facilitate Other Guest Transit: Providing bus service to the site for events;
4. Employee Transit Incentives: Providing employees with information regarding transit availability and offering employee incentives to use transit, including subsidized transit passes and/or a shuttle service to the Taylor Road/English Colony Way transit stop; and
5. Employee Carpool Incentives: Offering incentives to carpool, such as priority parking for carpools or rideshare matching service.

Guest carpooling incentives (#1) could be difficult to administer on a regular basis, as a monitor would be required to observe the arrival of individual parties of guests to identify

qualifying vehicles and to provide an incentive to individual drivers. Alternatively, monitoring the arrival of guests during a particular individual event that has a specific, limited arrival time for the majority of guests and an organizer who could administer/coordinate carpooling could be feasible, such as a corporate gathering where the incentive could be negotiated with the event organizer. However, the extent of the required incentive is currently unknown.

With respect to event guest shuttle service (#2), guest shuttles are typically used to compensate for a venue's lack of parking or inaccessibility. In regard to the project site, the roads to the site are adequate and on-site parking would be available. As such, the effectiveness of guest shuttles would be linked to the nature of the guests for a particular event and the willingness of the event promoter to direct guests to a satellite location. Guest shuttles are not likely to be effective if on-site parking is available.

With regard to facilitating other means of guest transit (#3), bus service could be arranged for guests to the project site by event organizers if an event attracting a specific group of guests originated from a particular location. To promote transit use, the project applicant could provide priority parking for event buses on-site.

With respect to employee transit incentives (#4), transit information could be feasibly provided and subsidized transit passes could be offered to interested employees; however, a shuttle to the transit stop would not be economically feasible, due to the limited number of on-site employees.

Finally, in regard to employee carpool incentives (#5), designating carpool parking spaces is feasible, as is an informal matching service. However, carpool effectiveness is dependent on employee residence locations. As such, with respect to the proposed project, carpooling may be ineffective, as the number of employees would be low (i.e., 12 regular employees and 17 during harvest) and potential residences are across a broad geographical area.

Overall, a portion of the above potential mitigation measures could be feasibly implemented. However, the extent to which the offered services and incentives would be used and their effectiveness in reducing project-generated VMT is uncertain. Minor changes to employee trip generation caused by carpooling or transit use would have a correspondingly low effect on total project VMT. For example, if 10 percent of employee trips were eliminated by use of carpooling or transit, the project's average annual daily trip generation would be reduced by 2.6 daily trips and the project's estimated VMT could be reduced by 1.4 percent (i.e., 2.6 ÷ 185.6 = 1.4 percent). Guest-oriented carpooling incentives could reduce the project's average daily VMT slightly. If incentives resulted in carpooling by half of the 200 guests for one of the 12 permitted special events, the average daily VMT could be reduced as follows:

- 100 persons ÷ 2.5 persons per vehicle x two trips per vehicle = 80 daily trips eliminated;
- 100 persons ÷ 4.0 persons per vehicle x two trips per vehicle = 50 trips added;
- 30 net trips eliminated x 13.8 miles per trips = 414 event VMT;
- 414 event VMT ÷ 365 days per year = 1.1 annual average daily VMT reduction; and

- 1.1 VMT = 0.6 percent of total project average daily VMT.

Guest-oriented transit use would also reduce the project's average daily VMT slightly. If buses were employed to transport half of the 200 guests for one of the 12 permitted special events, the average daily VMT could be reduced as follows:

- 100 persons ÷ 2.5 persons per vehicle x two trips per vehicle = 80 daily trips eliminated;
- 100 persons ÷ 40 persons per bus x two trips per bus = 5 trips added;
- 75 net trips eliminated x 13.8 miles per trips = 1,035 event VMT;
- 1035 event VMT ÷ 365 days per year = 2.8 annual average daily VMT reduction; and
- 2.8 VMT = 1.5 percent of total project average daily VMT.

As demonstrated above, minor changes to employee trip generation caused by carpooling or transit use would have a correspondingly low effect on total project VMT. Furthermore, even with the incorporation of VMT-reduction measures, the proposed project would still result in a net increase in total regional VMT and would, thus, continue to exceed the applicable threshold set forth by the Placer County Transportation Study Guidelines for Commercial Retail projects.

Based on the above, the proposed project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures could reduce project-generated VMT, but the efficacy of such measures is uncertain. As such, because Placer County cannot ensure the proposed project would result in zero net increase in total regional VMT, even with incorporation of the following mitigation measures, the impact would remain *significant and unavoidable*.

16-5(a) *During project operation, the project applicant shall distribute to employees and guests information regarding the availability of Placer Transit service in the project vicinity. Proof demonstrating compliance with this measure shall be submitted to the Placer County Community Development Resource Agency upon request.*

16-5(b) *During project operation, the project applicant shall provide an employee carpool matching service. Proof demonstrating compliance with this measure shall be submitted to the Placer County Community Development Resource Agency upon request.*

16-5(c) *Prior to approval of improvement plans for the phase containing the octagon building, the plans shall provide an on-site location for guest bus parking within the dedicated parking area. Final parking lot design shall be to the satisfaction of the Placer County Community Development Resource Agency.*

16-5(d) *During project operation, the project applicant shall encourage organizers of special events, or corporate type agricultural promotional events to carpool.*

Cumulative Impacts and Mitigation Measures

For further detail related to the cumulative setting of the proposed project, refer to Chapter 20, Statutorily Required Sections, of this EIR.

It should be noted that increased traffic volumes on local roadway facilities under cumulative conditions would not substantially alter performance related to bicycle facilities, pedestrian facilities, transit facilities and services, and emergency vehicle access. Rather, impacts to such facilities under Cumulative Plus Project conditions would be similar to those discussed above under Impacts 16-2, 16-3, and 16-4. In addition, construction activities associated with the project would be complete prior to the cumulative analysis year. Therefore, such topics are not discussed further in the cumulative analysis presented herein.

Similarly, the VMT impact analysis findings for Existing Plus Project conditions included under Impact 16-5 would also apply to Cumulative Plus Project conditions. As discussed further in Chapter 20 of this EIR, the cumulative analysis in this EIR is based upon a summary of projections contained in the Bickford Ranch Specific Plan (BRSP) EIR and the HBPCP. The County-approved BRSP would result in increased total VMT in the project region as would buildout of the planned land uses in the HBPCP. While the reasonably foreseeable cumulative development could implement mitigation measures to reduce their contributions to VMT increases to the extent feasible, the effectiveness of the mitigation measures in reducing VMT associated with future development in this relatively rural area of Placer County would be uncertain. Thus, the proposed project's contribution to total VMT in the project region, in combination with VMT generated by buildout of cumulative development, would remain significant and unavoidable.

17. Tribal Cultural Resources

17. TRIBAL CULTURAL RESOURCES

17.1 INTRODUCTION

The Tribal Cultural Resources chapter of the EIR addresses known and unknown tribal cultural resources in the vicinity of the project area. Pursuant to Public Resources Code (PRC) Section 21074, tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources, or included in a local register of historical resources as defined in Subdivision (k) of PRC Section 5020.1. This chapter summarizes the existing setting with respect to tribal cultural resources, identifies thresholds of significance, evaluates potential project impacts to such resources, and sets forth mitigation measures. Information presented in this chapter is primarily drawn from a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC), project notification and offer to consult letters sent by the County to Native American individuals and organizations, input from the United Auburn Indian Community (UAIC), as well as a Cultural Resources Study prepared by LSA Associates, Inc. (LSA) (see Appendix G).[1] This chapter also includes information from the Placer County General Plan[2], the General Plan EIR,[3] and the Horseshoe Bar/Penryn Community Plan (HBPCP).[4]

17.2 EXISTING ENVIRONMENTAL SETTING

A detailed overview of the project area's cultural history is included in Chapter 8, Cultural Resources, of this EIR. The sections below provide an ethnographic overview of tribal history within the project area, as well as an overview of the tribal outreach and consultation conducted for the proposed project, and any known tribal cultural resources within the area.

Ethnographic Overview

The project site exists within the ethnographic territory of the Southern Maidu or Nisenan. The Nisenan are part of the California Penutian linguistic family, which is further divided into the following four subfamilies: Wintuan, Maiduan, Yokutsan, and Utian. The Nisenan belong to the Maiduan subfamily, along with the Maidu and Konkow. The territory of the Nisenan, which includes the drainage of the American River, extended from the crest of the Sierra Nevada in the east to the Sacramento River in the west; as far south as the Cosumnes River; and north to the divide of the North Fork Yuba River and Middle Fork Feather River.

The Nisenan are divided into the Hill and Valley sociopolitical groups, which were further divided into "tribelets" that exerted political control over particular geographical areas. Valley Nisenan usually located their settlements on low, natural rises, knolls along streams and rivers, or on gentle slopes with southern exposures. The Nisenan lived in semipermanent settlements, consisting of one village, or a number of smaller villages clustered around one large village. Family groups

1 LSA Associates, Inc. *Cultural Resources Study – 7615 Callison Road Winery Project (BEM-08) Penryn, Placer County, California.* April 2021.
2 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

often lived away from the main village and had seasonal camps for resource procurement. Their houses were conical-shaped with coverings of bark, skins, and brush. Brush shelters were used in the summer and during gathering excursions. Most villages had bedrock mortar sites and acorn granaries.

The Nisenan relied heavily on acorns, local game, and fish for subsistence. Acorns were gathered communally or individually. Deer, bear, salmon, birds, and rabbits were important in the Nisenan diet, along with insects such as grasshoppers, crickets, and locusts. Freshwater mussels were also eaten, along with a variety of berries, wild plums, and grapes. Manzanita cider was a preferred beverage.

Stone tools used by the Nisenan included knives, projectile points, arrow straighteners, scrapers, pestles, mortars, and pipes. Wooden digging sticks were used for procuring roots and other food resources, and wooden mortars were used for food preparation. Tule was used for mats, netting, fish nets, and canoes. Willow and redbud were preferred materials for weaving baskets, which were used for food storage and cooking, cradles, seed beaters, and cages.

The traditional culture and lifeways of the Nisenan who inhabited the fertile plains between Sacramento and the Sierra foothills were disrupted beginning in the early 1800s with Spanish and American incursions into Nisenan territory. During the 1800s, infectious European disease and the influx of European settlers had devastating effects on Native Californians. By 1850, with their lands, resources, and way of life being overrun by the steady influx of non-native people during the Gold Rush, surviving Nisenan moved to the foothills and mountains, or labored for the growing ranching, farming, and mining industries in the area. Today, Nisenan descendants reside on the Auburn, Berry Creek, Chico, Enterprise, Greenville, Mooretown, Shingle Springs, and Susanville rancherias, as well as on the Round Valley Reservation.

The UAIC is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Indians and are traditionally and culturally affiliated with the project area. The Tribe possesses the expertise concerning tribal cultural resources in the area and are contemporary stewards of their culture and the landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. The Tribe's goal is to ensure the preservation and continuance of their cultural heritage for current and future generations.

Tribal Outreach and Known Tribal Cultural Resources

LSA contacted the NAHC requesting a search of the SLF for Native American cultural resources within or near the preliminary Study Area, which completely encompasses the 17.96-acre project site (see Figure 8-1 in the Cultural Resources chapter of this EIR). The results of the search returned by the NAHC on July 16, 2020 were negative for Native American cultural resources in the Study Area. The NAHC provided contact information for tribal members or organizations affiliated with the region, and recommended that the tribes be contacted for more information on the potential for Native American cultural resources within or near the project site. The tribes were contacted by the County as part of Assembly Bill (AB) 52 tribal consultation, which is discussed further below.

As discussed further in the Method of Analysis section, LSA conducted research to obtain archaeological, ethnographic, historical, and environmental information about the preliminary Study Area and surrounding area as part of the Cultural Resources Study. The literature reviewed included publications, maps, local historical directories, and websites for archaeological,

ethnographic, historical, and environmental information about the project site and the surrounding vicinity. In addition, a pedestrian survey of the preliminary Study Area was conducted on July 14, 2020. Through the course of the literature review and on-site pedestrian survey, known tribal cultural resources were not identified within the Study Area.

Tribal Consultation

Pursuant to AB 52, invitations to consult were sent to tribes who requested notification of proposed projects within the geographic area of the project site on September 1, 2021. Specifically, notification letters were sent to the Ione Band of Miwok Indians, UAIC, Washoe Tribe of Nevada and California, and Colfax-Todds Valley Consolidated Tribe.

On September 14, 2021, the UAIC Tribal Historic Preservation Department responded to the notification letter. According to the response letter, the UAIC reviewed the project site through the tribe's Tribal Historic Resource Information System (THRIS) database and determined that areas of cultural sensitivity and/or known tribal cultural resources are not within or adjacent to the site. As a result, the UAIC declined to consult on the proposed project. However, the UAIC requested that the tribe's standard unanticipated discoveries mitigation measure be included in the EIR, which is detailed further in the Impacts and Mitigation Measures section of this chapter. The County did not receive responses from the other aforementioned tribes in response to the AB 52 notification letters.

17.3 REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant tribal cultural resources that may be affected by actions that they undertake or regulate. The following section contains a summary of basic federal and State laws governing preservation of tribal cultural resources of national, regional, State, and local significance.

Federal Regulations

The following are the federal environmental laws and policies relevant to tribal cultural resources.

Section 106 for the National Historical Preservation Act of 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historical Preservation Act (NHPA) of 1966. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in Title 36 of the Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the NHPA (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

State Regulations

The following are the State environmental laws and policies relevant to tribal cultural resources.

Assembly Bill 52

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources," pursuant to PRC Section 21074(a), are defined as either:

> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
>
> (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
> (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. AB 52 (PRC Section 21080.3.1) requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe(s).

Public Resources Code Section 5024.1(c)

According to PRC Section 5024.1(c), a resource may be listed as a historical resource in the California Register of Historical Resources if the resource meets any of the following NRHP criteria:

> (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
> (2) Is associated with the lives of persons important in our past.
> (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
> (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Local Regulations

The following are the local government's environmental policies that are intended to protect tribal cultural resources by mitigating the potential impacts of new development in areas containing important tribal cultural resources.

Placer County General Plan

The following goals and policies from the Placer County General Plan related to tribal cultural resources are applicable to the proposed project.

Cultural Resources

Goal 5.D To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policy 5.D.3 The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

Policy 5.D.7 The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Policy 5.D.12 The County shall consider acquisition programs (i.e. Placer Legacy Open Space and Agricultural Conservation Program) as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, the Native American community, and local land trusts.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the Natural Resources Management Element of the HBPCP related to tribal cultural resources are applicable to the proposed project.

Cultural and Paleontological Resources

Goal d Initiate contact with local Native American organizations and representatives to assure that the Native American community has early access to the planning process.

17.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to tribal cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, and Placer County's Environmental Checklist, an impact related to tribal cultural resources is considered significant if the proposed project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Method of Analysis

The impact analysis contained in this chapter is primarily based on a SLF search conducted by the NAHC, project notification and offer to consult letters sent by the County to Native American individuals and organizations, pursuant to AB 52, and follow up responses from Native American tribes, as well as a Cultural Resources Study prepared by LSA. The methods of analysis are described in further detail below.

Native American Tribal Consultation

Pursuant to AB 52, invitations to consult were sent to tribes who requested notification of proposed projects within the geographic area of the project site on September 1, 2021. Specifically, notification letters were sent to the Ione Band of Miwok Indians, UAIC, Washoe Tribe of Nevada and California, and Colfax-Todds Valley Consolidated Tribe. On September 14, 2021, the UAIC Tribal Historic Preservation Department responded to the notification letter. The County did not receive responses from the other aforementioned tribes in response to the AB 52 notification letters.

The identification of tribal cultural resources for this project by UAIC included a review of pertinent literature and historic maps, and a records search using UAIC's THRIS database, which is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the NAHC. The THRIS resources in the project region also include previously recorded indigenous resources identified through the California Historic Resources Information System (CHRIS) North Central Information Center (NCIC) as well as historic resources and survey data.

Review of the project site through the THRIS database did not identify areas of cultural sensitivity or known tribal cultural resources in or adjacent to the site. As such, the UAIC declined to consult on the proposed project. The UAIC requested that the tribe's standard unanticipated discoveries mitigation measure be included in this EIR. The measure is incorporated under Impact 17-1.

Cultural Resources Study

Preparation of the Cultural Resources Study included a records search by staff at the NCIC at California State University, Sacramento, of a preliminary 77.99-acre Study Area and a 0.25-mile

radius, the boundaries of which encompassed the 17.96-acre project site. The NCIC, an affiliate of the State of California Office of Historic Preservation, is the official State repository of cultural resource records and reports for Placer County. The records search included a review of the following federal and State inventories:

- California Inventory of Historic Resources;
- Five Views: An Ethnic Historic Site Survey for California;
- California Points of Historical Interest;
- California Historical Landmarks;
- Archaeological Determinations of Eligibility; and
- Built Environment Resources Directory (BERD).

As noted previously, LSA also contacted the NAHC to request a search of the SLF for the Native American cultural resources within or near the Study Area on July 16, 2020. The SLF is populated by members of the Native American community who have knowledge about the locations of tribal cultural resources. The larger preliminary Study Area was also used as part of a NAHC Sacred Lands File search.

Additional methods of analysis, including a literature and map review, an inquiry to the Placer County Historical Society, and a field survey, are described in further detail below.

Literature and Map Review

LSA conducted research to obtain archaeological, ethnographic, historical, and environmental information about the preliminary Study Area and surrounding area. The literature reviewed included publications, maps, local historical directories, and websites for information about the project site and the surrounding vicinity. The maps reviewed by LSA included the U.S. Geological Survey (USGS) 7.5-minute Rocklin topographic quadrangle of 1954 and 1967. Aerial images reviewed included photographs of the Study Area dated to 1952, 1966, 1993, 1998, 2002, 2005, 2009, 2010, 2012, 2014, and 2016.

Field Survey Methods

LSA conducted a pedestrian survey of the preliminary Study Area on July 14, 2020. Overall visibility of the project site was approximately 85 percent, limited only by low-growing grasses. A small area in the southeast corner of APN 031-220-061 was set aside for beekeeping and was surveyed from a distance, with the ground surface exposed and easily viewable. Large granite outcroppings were inspected for cultural modification. In addition, ground squirrel burrows were observed throughout the property and inspected for any subsurface soil changes that could indicate a buried cultural resources deposit.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

17-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Based on a records search of the THRIS conducted by the UAIC, areas of cultural sensitivity and/or known tribal cultural resources are not within or adjacent to the project site. In addition, a search of the SLF conducted by the NAHC for Native American cultural resources within the project site, returned negative results, indicating known tribal cultural resources are not within the project site or immediate vicinity.

Pursuant to the field survey conducted by LSA, the Study Area is primarily used for maintaining the Antelope Canal and beekeeping, and has previously been used for cattle grazing. Near the beekeeping area, several charcoal bits were observed on the ground surface, indicating a recent burn that has since been removed. Flattened areas did not appear natural, but were graded or filled with imported sand. Ground squirrel burrows were observed throughout the property and inspected for any subsurface soil changes that could indicate a buried cultural resources deposit. Soil changes were not observed. The Cultural Resources Study identified two resources within the project site (a segment of Antelope Canal and a portion of Callison Road), and a third potential historic-period cultural resource (the original Central Pacific Transcontinental Railroad) was identified adjacent to the site (see Table 8-1 in the Cultural Resources chapter of this EIR). However, none of the aforementioned resources, which are analyzed for significance as historical resources under Impact 8-1 in the Cultural Resources chapter, meet the definition of a tribal cultural resource, as defined by PRC Section 21074(a). Therefore, potential project impacts to the aforementioned features would not constitute an adverse change of any severity to a tribal cultural resource.

Based on the findings of the Cultural Resources Study, the results of the NAHC SLF search, and the results of the UAIC's review of the tribe's THRIS database, known tribal cultural resources do not occur on-site or in the project vicinity. Nevertheless, while background research and the field survey did not indicate the presence of known tribal cultural resources, subsurface Native American resources could potentially be identified in the project site during project construction activities. As detailed in the Project Description chapter of this EIR, construction of the proposed project would occur over approximately 29 months and involve approximately 190,000 cubic yards of fill, 165,000 cubic yards of cut, and 25,000 cubic yards of excavation, overall creating a balance of import/export on-site. In the event that tribal cultural resources are discovered during such activities, or any other project construction activities, without proper measures to ensure such resources are protected, a significant impact could occur.

Based on the above, without inclusion of appropriate measures to account for unanticipated discoveries of potential, subsurface tribal cultural resources, the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074, during project construction, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

17-1 *The following language shall be noted on project Improvement Plans, subject to review and approval by the Placer County Community Development Resource Agency:*

If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.

A qualified cultural resources specialist and Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts. The UAIC does not consider curation of tribal cultural resources to be appropriate or respectful and requests that materials not be permanently curated, unless specifically requested by the Tribe.

If articulated or disarticulated human remains are discovered during construction activities, the County Coroner and Native American Heritage Commission shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Additional detail regarding the cumulative project setting can be found in Chapter 20, Statutorily Required Sections, of this EIR.

17-2 Cause a cumulative loss of tribal cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

Generally, while some tribal cultural resources may have regional significance, the resources themselves are site-specific, and impacts are project-specific. For example, impacts to a subsurface tribal cultural resource at one project site would not generally be made worse by impacts to a tribal cultural resource at another site due to development of another project. Rather, the resources and the effects upon them are generally independent. A possible exception to the aforementioned general conditions would be where a tribal cultural resource represents the last known example of its kind or is part of a larger resource site. For such resources, cumulative impacts, and a project's contribution to them, may be considered cumulatively significant.

As described throughout this chapter, the project site does not contain known resources that would be eligible for inclusion on the NRHP or considered significant pursuant to CEQA. Furthermore, implementation of the project-specific mitigation measures set forth in this EIR (Mitigation Measure 17-1 and mitigation measures contained in Chapter 8, Cultural Resources, of this EIR) would ensure that any impacts to previously unknown, subsurface resources that are discovered on the project site during construction activities are reduced to a less-than-significant level.

Similar to the proposed project, future development projects within the project region would require consultation with tribes who are culturally and traditionally affiliated with the project region to implement project-specific mitigation measures that would ensure any potential impacts to identified tribal cultural resources are reduced to a less-than-significant level, where possible. Therefore, given that tribal cultural resource impacts are generally site-specific and each future project within the project region would be required to mitigate such impacts, any potential impacts associated with cumulative buildout of the project region would not combine to result in a significant cumulative impact.

Based on the above, the potential for impacts related to a cumulative loss of tribal cultural resources, to which implementation of the proposed project might contribute, is ***less than significant.***

Mitigation Measure(s)

None required.

18. Wildfire

18. WILDFIRE

18.1 INTRODUCTION

The Wildfire chapter of the EIR summarizes the existing wildfire setting and identifies the wildfire potential within the project area. The chapter describes the fire types that occur in the project region, wildland fire hazards associated with the project site, the fire history in the project region, the fuel treatment projects, such as mechanical thinning and prescribed fire, within the region, and consideration of site-specific factors that may affect the wildfire potential at the project site. The information contained in the analysis was sourced from publicly available information provided by the California Department of Forestry and Fire Protection (CAL FIRE), the California Public Utilities Commission (CPUC), the Penryn Fire Protection District (PFPD), and the Newcastle Fire Protection District (NFPD). Further information was sourced from the Placer County General Plan,[1] the Placer County General Plan EIR,[2] the Horseshoe Bar/Penryn Community Plan (HBPCP),[3] and the Placer County Conservation Program (PCCP).[4]

18.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing wildfire setting in the project region, including the existing fire types, wildland fire hazards, fuel treatment efforts, public safety power shutoffs, and fire protection agencies and resources in the project region.

Fire Types

The following sections describe the three fire types to which various areas of Placer County are at risk of experiencing.

Wildfires

Wildfires occur on mountains, hillsides, and grasslands. Vegetation, wind, temperature, humidity, and slope are all factors that affect how wildfires spread. In Placer County, native vegetation, such as chaparral, sage, and grassland, provide fuel that allows wildfires to spread easily across large tracts of land. Such plant species are capable of regeneration after a fire, making periodic wildfires a natural part of the local ecology. Placer County is considered a rural/suburban County with wildfire as the most prevalent fire type. The climate of the Placer County region keeps the grass dry, which makes the region's grass more readily combustible during fire season. As discussed in further detail in the Topography and Vegetation subsection, steep slopes bring grass and brush within reach of upward-moving flames, while impeding the access of firefighting equipment. Seasonal drought conditions exacerbate fire hazards.

Wildland-Urban Interface Fires

The wildland-urban interface (WUI) zone is an area where buildings and infrastructure (e.g., cell towers, schools, water supply facilities) mix with areas of wildland vegetation susceptible to ignition due to several factors, including topographical features, vegetation fuel types, local

1 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).
4 Placer County. *Placer County Conservation Program*. September 1, 2020.

weather conditions, and prevailing winds. The interface is sometimes divided into the defense zone (areas near communities, usually about 0.25-mile thick) and threat zones (an approximately 1.25-mile buffer around the defense zone). Wildfires and urban interface fires have occurred within Placer County, especially in the Sierra Nevada region where a majority of parcels are within a Very High Fire Hazard Severity Zone (FHSZ).

In the WUI zone, efforts to prevent ignitions and limit wildfire losses hinge on hardening structures and creating defensible space through a multi-faceted approach, including engineering, enforcement, education, emergency response, and economic incentive. Different strategies in the defense and threat zones of the WUI help to limit the spread of fire and reduce risks to people and property. As discussed in further detail in the Wildfire Classifications subsection, wildfire threat within the County ranges from Moderate to Very High. The highest threat occurs in the Sierra Nevada, which is considered a Very High FHSZ, whereas the County's valley and foothill regions are considered Moderate and High FHSZs.

Structural Fires

Urban fires occur in developed environments, destroying buildings and other humanmade structures. Structural fires are often caused by faulty wiring or mechanical equipment or combustible construction materials, and are able to proliferate due to the absence of fire alarms and sprinkler systems. The fires have been due largely to human accidents, although deliberate fires (arson) may be a cause of some events. Older buildings that lack modern fire safety features may face greater risk of damage from fires. To minimize fire damage and loss, the County's Fire Code, based on the California Fire Code (CFC), sets standards for building and construction. It requires the provision of adequate water supply for firefighting, fire retardant construction, and minimum street widths, among other things. Fire prevention awareness programs and fire drills are conducted to train residents to respond quickly and correctly to reduce injury and losses during fires.

Wildland Fire Hazards

The following section includes a discussion of the potential for wildland fires to occur in the project area and the agencies and resources available for wildland fire suppression.

Wildfire Classifications

With respect to wildland fires, previous significant WUI fires within the State have precipitated the passage of statutes necessitating the classification of wildland fire hazard areas, according to a location's potential for causing ignitions to buildings. Such classifications are referred to as FHSZs and provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings in the WUI zones.

Pursuant to Government Code Section 51178, Very High FHSZs are determined by the Director of Forestry and Fire Protection, based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in such areas. Very high FHSZs are based on fuel loading, slope, fire weather, and other relevant factors, including areas where Santa Ana, Mono, and Diablo winds have been identified by the CAL FIRE as a major cause of wildfire spread. Public Resources Code (PRC) Sections 4201 through 4204 direct CAL FIRE to map fire hazards within State Responsibility Areas (SRAs), based on relevant factors such as fuels, terrain, and weather. SRAs are recognized by the Board of Forestry and Fire Protection as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention.

The project site is located within a SRA. Therefore, CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. As shown in Figure 18-1, the project site is identified by CAL FIRE as being within a Moderate FHSZ area. Additionally, the project site is located within a WUI zone (see Figure 18-2).

Topography and Vegetation

Topography, which includes slope and aspect, can play a significant role in wildfire risk. Fires burn faster uphill than downhill, due to fuels above a fire being brought into closer contact with upward moving flames. In addition, the process of heat transfer is influenced by topography, because heat rises (convection) and heat transfer through convection tends to move upward. Furthermore, during wildfires, burning materials on the forest floor also create convection currents that preheat the leaves and branches of shrubs and trees above the fire. Heat transfer, therefore, occurs more rapidly through fuels up a slope, resulting in fire traveling more quickly upslope than downslope.

Vertical air currents can also lift burning materials, as floating embers, known as firebrands, can settle in unburned areas ahead of a fire, starting smaller fires. The phenomenon is called spotting and can result in rapid advancement of a fire.

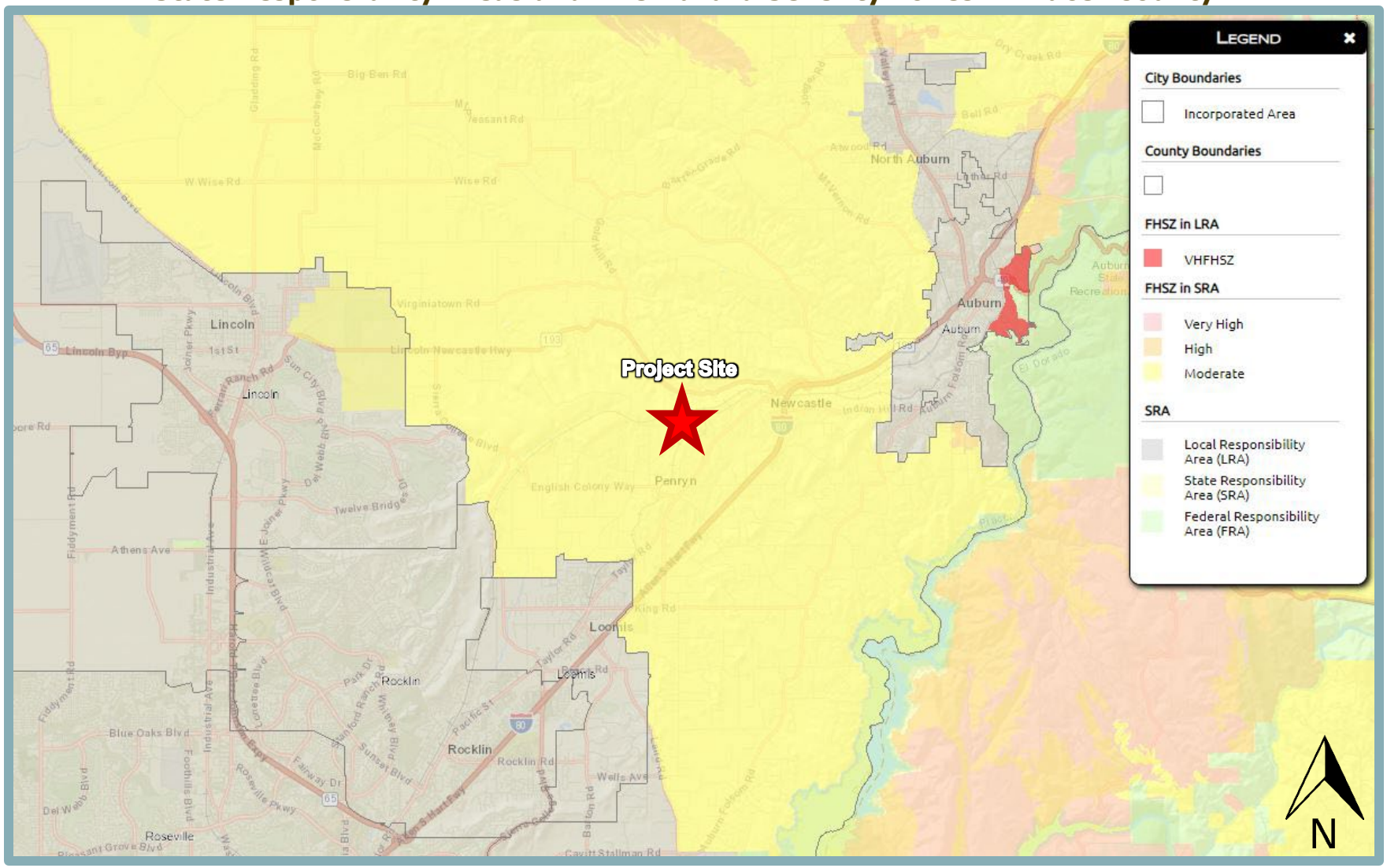
With respect to the project region's topography, the project region includes the community of Penryn, which is situated in the foothills of the Sierra Nevada in unincorporated Placer County. As discussed in the Project Description chapter of this EIR, the southerly portion of the project site is located within the northwest portion of the HBPCP area.[5] The remainder of the project site, on which the winery facilities would be located, is adjacent to the HBPCP area's northern boundary. The terrain of the HBPCP area varies from nearly flat and gently rolling in the western portion to fairly steep hillsides in the eastern portion. Elevations range from 200 to 1,200 feet above mean sea level (msl), but the majority of the plan area is between 500 and 800 feet msl. While steep slopes and canyons are located north of Penryn and to the south of State Route (SR) 193, overall, Penryn does not contain steep slopes or significant slopes, such as those in steep-walled canyons or mountainous valleys. The absence of steep and significant slopes limits wildfire risks related to topography in the project region.

With regard to the project region's vegetation, Penryn is comprised of a variety of scattered single-family homes, distributed across a landscape of agricultural fields intermixed with large areas of natural vegetation. A complex and widespread drainage pattern spans the HBPCP area, which collects surface runoff and is comprised of Antelope Creek, Miner's Ravine, Mormon Ravine, and Secret Ravine as the main watercourses. Riparian woodland is located along the various watercourses. Additionally, blue oak woodlands, interior oak woodlands, and valley oak savanna are the dominant oak communities that occur throughout the plan area. The region also consists of areas of annual grassland. The existing vegetation within the project region provides potential fuel for wildfire.

The 44.14-acre parcel area is located at approximately 800 feet above msl and slopes moderately from the east towards the west. Within the parcel area, the project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as a total of 6.3 acres of oak woodland and 2.6 acres of annual brome grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project site boundaries, but located within the parcel area.

[5] Placer County. *Horseshoe Bar/Penryn Community Plan*. August 16, 1994 (updated June 28, 2005).

Figure 18-1
State Responsibility Areas and Fire Hazard Severity Zones in Placer County



Source: California Department of Forestry and Fire Resources, Fire Hazard Severity Zone Viewer, 2022.

Figure 18-2
Wildland-Urban Interface Zones in Project Vicinity



Source: CalVTP Treatable Landscapes, 2022.

The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. Site elevation ranges from approximately 700 feet to 950 feet. Given the gently rolling terrain across the project site, slope would not significantly affect on-site fire behavior, as compared to the more mountainous areas north of the parcel area closer to SR 193. However, the existing vegetation within the project site and parcel area provides potential fuel for wildfire.

Additionally, the project site is located within a rural residential area of Placer County. Primarily undeveloped land is located north of the site, and rural single-family residences scattered across grassland/agricultural land are to the east, south, and west, all of which provide potential fuel sources for wildfire.

Climate

Predominant weather patterns in southwest Placer County are characterized by hot dry summers and mild to cool winters. Dry conditions traditionally begin around the end of May and last into October. An average summer day is 90 to 95 degrees Fahrenheit, with winds from the southwest at zero to 10 miles per hour (mph) and relative humidity levels in the 15 to 25 percent range. On average, the strongest wind speeds in south Placer County occur in March through May, but winds can exceed 20 mph during the fire season. Summer lightning storms are infrequent in the area. Critical fire weather conditions are becoming more frequent in the region starting in July and extending through October each year and are typically associated with very low humidity and strong north winds. The ignition potential and fire spread rates during critical fire weather conditions is high and can easily lead to large wildfires within the project area.

Prevailing Winds

The predominate wind direction at the project site is from the south the majority of the year.[6] Southerly winds are most dominant from mid-February to mid-March. In addition, winds also occur from the east during the winter months. The southerly direction of prevailing winds suggests that, during the majority of the year, winds would generally facilitate the spread of fire towards the north of the project site. Additionally, a fire burning to the east could potentially move towards the site.

Large Fire History

According to CAL FIRE, relatively few larger wildfires, defined as 10 acres or greater, have occurred within the region surrounding the project site over the past three years.[7]

- In September 2022, the Mosquito Fire ignited near Mosquito Road and the OxBow Reservoir, east of the community of Foresthill in Placer County. As of September 21, 2022, the fire had burned 76,290 acres in Placer and El Dorado Counties, and damages were as follows: 13 structures damaged and 78 structures destroyed.
- In September 2021, the Bridge Fire burned 411 acres in Placer County, along the North Fork American River and its drainages, near the Foresthill Bridge in the City of Auburn, approximately 7.4 miles northwest of the project site. Damages were as follows: one injury. Structures were not reported as damaged or destroyed.
- In August 2021, the River Fire burned 2,619 acres in Nevada and Placer counties, along the Bear River and its drainages, near Milk Ranch Road and Bear River Campground

[6] Weather Spark. *Climate and Average Weather Year Round in Loomis*. Available at: https://weatherspark.com/y/1143/Average-Weather-in-Loomis-California-United-States-Year-Round. Accessed March 2022.

[7] California Department of Forestry and Fire Protection. *Incidents Overview*. Available at: https://www.fire.ca.gov/incidents/. Accessed September 2022.

Road. Damages were as follows: 21 structures damaged, 142 structures destroyed, and four injuries.

- In June 2021, the Watt Fire burned 42 acres in Placer County, near the intersection of PFE Road and Watt Avenue to the west of the City of Roseville. The fire was a grassland fire, caused by non-arson human activity. Damages to structures or injuries to fire personnel and/or civilians were not reported. Most of the grassland fuel source has since been removed, due to development of structures and infrastructure, which has reduced the risk of fire hazard in the area.
- In August 2020, the Perry Fire burned nine acres in Placer County, near the intersection of Perry Ranch Road and Werner Road in the City of Auburn, approximately 3.1 miles northeast of the project site. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In August 2020, the Duluth Fire burned 65 acres in Placer County, near the intersection of Duluth Avenue and Nichols Drive to the west of the City of Rocklin. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In June 2020, the Nelson Fire burned 110 acres in Placer County, near the intersection of Nelson Road and Rockwell Lane to the west of the City of Lincoln. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In June 2020, the Watt Fire burned 40 acres in Placer County, near the intersection of PFE Road and Watt Avenue to the west of the City of Roseville. The fire was a grassland fire, caused by non-arson human activity. Damages to structures or injuries to fire personnel and/or civilians were not reported. Most of the grassland fuel source has since been removed, due to development of structures and infrastructure, which has reduced the risk of fire hazard in the area.
- In June 2020, the Karchner Fire burned 39 acres in Placer County, near the intersection of Karchner Road and Riosa Road to the east of the City of Wheatland. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In June 2020, the Amoruso Fire burned 650 acres in Placer County, near the intersection of Sunset Boulevard West and Amoruso Way to the southwest of the City of Lincoln. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In November 2019, the Foothills Fire burned 355 acres in Placer County, near the intersection of Foothills Boulevard and McAnally Drive in the City of Roseville. Damages to structures or injuries to fire personnel and/or civilians were not reported.
- In September 2019, the Baseline Fire burned 604 acres in Placer County, near the intersection of Baseline Road and County Acres Lane to the west of the City of Roseville. The fire was a grassland fire, caused by non-arson human activity. Damages to structures or injuries to fire personnel and/or civilians were not reported. Most of the grassland fuel source has since been removed, due to development of structures and infrastructure, which has reduced the risk of fire hazard in the area.
- In June 2019, the Dyer Fire burned 148 acres in Placer County, near the intersection of Watt Avenue and Dyer Lane to the west of the City of Roseville. The fire was a grassland fire, caused by non-arson human activity. Damages to structures or injuries to fire personnel and/or civilians were not reported. Most of the grassland fuel source has since been removed, due to development of structures and infrastructure, which has reduced the risk of fire hazard in the area.
- In June 2019, the Watt Fire burned 27 acres in Placer County, near the intersection of Watt Avenue and Baseline Road to the west of the City of Roseville. The fire was a grassland fire, caused by non-arson human activity. Damages to structures or injuries to fire personnel and/or civilians were not reported. Most of the grassland fuel source has

since been removed, due to development of structures and infrastructure, which has reduced the risk of fire hazard in the area.

- In May 2019, the Sugar Fire burned 65 acres in Placer County, near the intersection of Sugar Pine Road and Big Reservoir Road to the northeast of the community of Foresthill. Damages to structures or injuries to fire personnel and/or civilians were not reported.

CAL FIRE strives to extinguish 95 percent of all wildland fires at 10 acres or less. Additional fires, beyond those listed above, have occurred within the region surrounding the project site over the past three years. The fires, for the most part, were extinguished within the above stated goal of under 10 acres.

Fuel Treatment Efforts

Fuel treatment efforts have been ongoing within the project region. Forest fuel treatments are used by managers for ecological restoration and reducing fire hazards. Due to past management decisions and long-term fire exclusion, forests are denser and are susceptible to severe wildfires. Fuel treatments aim to reduce the intensity and size of wildfires, increase species diversity, and restore forests to their historical condition. Two common types of treatments include:

- Mechanical thinning: cutting and clearing wood and brush; and
- Prescribed fire: burning existing fuel before more accumulates.

Based on proximity to homes and communities, one treatment may be used over the other. Several research studies show a combination of thinning, followed by burning of surface fuels, is most effective in promoting forest resilience to wildfire.[8]

Implementation of the PCCP would result in the permanent protection of approximately 50,000 acres in conservation reserves by the year 2060. Preservation of the protected lands require that they are managed to reduce their susceptibility to wildfire. For example, each Reserve System unit would have a fire management component that would describe site-specific conditions and actions required to (1) reduce existing fuel loads, (2) re-introduce fire as a natural process of the ecosystem (if permissible), (3) minimize environmental effects and protect sensitive resources, and (4) enhance and/or restore natural community characteristics.

Current fuel reduction efforts (i.e., the Chipper Program) and new programs (i.e., the Biomass Box Program) would accomplish fuel reduction treatment efforts. The Placer County Resource Conservation District's (RCD) Chipper Program provides low-cost brush chipping for residents in Placer County. The Chipper Program continues to be available for local residents seeking to reduce fire hazards and improve defensible space around buildings and structures. The Chipper Program is funded through grants secured through a partnership with the RCD, Placer County Office of Emergency Services (OES), the Placer County Sheriff's Office, the Placer County Air Pollution Control District, and CAL FIRE.[9]

The Placer County Wildfire Protection and Biomass Utilization Program (i.e., the Biomass Box Program) was established in 2006 to help protect residents, communities, forests, and important

[8] For example, see U.S. Department of Agriculture/Forest Service, Rocky Mountain Research Station. *Review of Fuel Treatment Effectiveness in Forests and Rangelands and a Case Study from the 2007 Megafires in Central Idaho USA (General Technical Report RMRS-GTR-252)*. January 2011.

[9] Placer County. *Chipper Program Available for Placer County Residents*. Available at: https://www.placer.ca.gov/483/_1122012. Accessed March 2022.

forest resources from the threat of wildfire and to efficiently manage and use biomass. Many wildfire protection activities and projects involve the cutting of trees and brush to reduce wildfire hazard. Trees large enough to have commercial value as lumber are transported to mills for processing, but brush, small trees, and the limbs and tops of larger trees are excess biomass that has most often been disposed of by open burning to complete the necessary reduction of fire hazard. Placer County has recognized that a better option is to use the excess biomass for generation of energy. As part of the thinning of forested areas, the excess brush, small trees, limbs, and tree tops are ground and then transported by way of haul trucks to a biomass power plant. Using excess biomass for generation of energy provides benefits through offsetting fossil fuel energy generation, reducing air pollution emissions, and increasing support for jobs associated with the biomass utilization. Use of biomass for energy also has potential to help support the economic sustainability of forest management and hazard reduction projects designed to reduce the negative effects of wildfires.[10]

Public Safety Power Shutoffs

In an effort to prevent fires, the electrical services provider for southern Placer County, Pacific Gas & Electric Co. (PG&E), initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the County.

Similarly, the Sacramento Municipal Utility District (SMUD), a community-owned electric utility that serves Sacramento County and portions of Placer County, maintains the option, if necessary, of shutting off power. SMUD has protocols for disabling automatic reclosers and for de-energizing lines to protect public safety and also has an Outage Communications Plan that addresses potential de-energization events. In the event that power must be shutoff, SMUD will include targeted messaging for affected areas that will set expectations and identify support resources.

The CPUC adopted the High Fire-Threat District Map in 2018, which serves to assist in the public's protection from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities by delineating fire-threat areas in the State.[11] Fire-threat areas are designated as Tier 1, 2, or 3, with Tier 1 defined as a High Hazard Zone, Tier 2 as an Elevated Hazard Zone, and Tier 3 as an Extreme Hazard Zone.

The project site is located within a Tier 2 zone, which is an area subject to an elevated risk from wildfires associated with overhead utility powerline facilities, including those that support communication facilities (see Figure 18-3). Based on the project site's location within a Tier 2 zone, the site could be subject to PSPS events.[12]

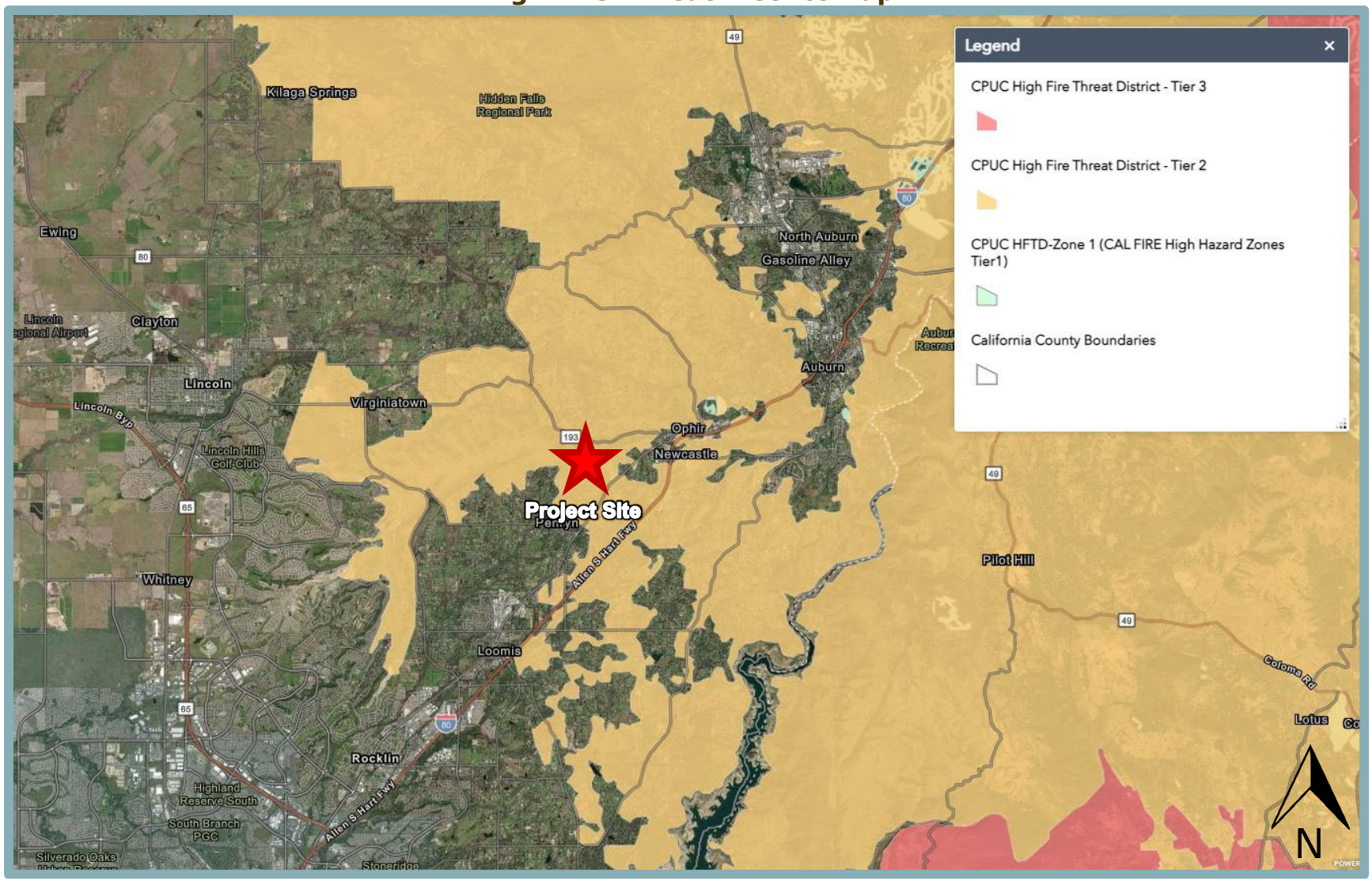
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[10] Placer County Community Development Resource Agency. *Biomass and Wildfire Protection.* Available at: https://www.placer.ca.gov/2881/Biomass-Wildfire-Protection. Accessed March 2022.

[11] California Public Utilities Commission. *Fire-Threat Maps and Fire-Safety Regulations Proceedings*. Available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking. Accessed March 2022.

[12] Pacific Gas & Electric Co. *Determining When to Turn Off Power For Safety: Decision-Making for Public Safety Power Shutoffs.* Available at: https://www.pge.com/pge_global/common/pdfs/outages/public-safety-power-shutoff/PSPS-Decision-Making-Technical-Fact-Sheet.pdf. Accessed March 2022.

Figure 18-3
High Fire-Threat District Map



Source: California Public Utilities Commission, CPUC High Fire Threat District (HFTD) Map, 2022.

Throughout PSPS events, emergency services in Placer County remain functional with back-up power supplies, but many businesses and agencies are not operational, which can result in inadequate access to medical services and exposure to excessive heat or cold.

Fire Agencies and Resources

Several fire agencies provide fire protection services within the project area, including both wildland fire and structural fire response. Responsibility for wildland fire suppression at the project site is the sole responsibility of the State (i.e., CAL FIRE), given that the project site is located within a SRA. Fire and rescue service for the project site are the responsibility of the PFPD, as well as the NFPD. More specifically, the octagon building would be within the PFPD district, and the processing/warehouse building would be within the NFPD boundaries.

California Department of Forestry and Fire Protection

Wildland fire protection is provided either by the State (through CAL FIRE) or the federal government (through the U.S. Forest Service).

The State has direct protection responsibility for all State and private wildlands (or forest lands) in designated areas, and provides support and assistance to local jurisdictions in other areas of the State. CAL FIRE is responsible for wildland fire response at the project site. The CAL FIRE Nevada-Yuba-Placer Ranger Unit serves the project area. CAL FIRE strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department response time of five minutes 90 percent of the time. The nearest CAL FIRE station to the project site is Station No. 182, located at 9305 Wise Road, Auburn, approximately 2.7 miles northeast of the project site. The CAL FIRE station is jointly operated with the Placer County Fire Department (PCFD) and provides services to the unincorporated areas of Placer County. Station No. 182 is a full-time staffed station. The full-time firefighters are augmented by seasonal and volunteer firefighters that support the emergency response capabilities of CAL FIRE and PCFD. In addition to legal responsibility for wildland fires in SRAs, where the project site is located, CAL FIRE has mutual and/or automatic aid agreements, and, thus, may assist local fire agencies with structural fires and medical incidents under the closest resource concept.

Penryn Fire Protection District

The PFPD would be responsible for providing fire and rescue services to the portion of the project site in which the octagon building is proposed. PFPD Station No. 38 is located at 7206 Church Street in the Penryn community, one mile southwest of the project site. PFPD services are provided by Type I/III fire engines staffed daily by a minimum of two full-time firefighters. The average response time encouraged for local fire protection agencies by the County for rural areas is 10 minutes or less, pursuant to Placer County General Plan Policy 4.I.2.

Automatic and mutual aid agreements between PFPD, NFPD, and neighboring jurisdictions, including South Placer Fire, Placer Hills Fire, CAL FIRE and the cities of Lincoln, Rocklin, and Auburn, are in place to provide an increased level of protection and to ensure the most efficient service to the community. Current response times in the project area are between five and eight minutes, which is better than the State average of 12 minutes.

Newcastle Fire Protection District

The NFPD would be responsible for providing fire and rescue services to the portion of the project site in which the processing/warehouse building would be constructed. The NFPD's service

territory covers 15 square miles, which includes approximately 6,200 residents and results in approximately 700 calls for service annually.

The NFPD is served by one station, located at 9211 Cypress Street, approximately 1.8 miles northeast of the project site. The current NFPD fire station has been used since 1922 and does not meet the needs of an Essential Public Service Facility. As such, the NFPD is currently in the process of building a new station located at 9358 Old State Highway in Newcastle, to which the NFPD's operations would be relocated. The site of the new station is approximately 1.7 miles east of the project site. The NFPD is governed by a five-member Board of Directors which is elected by voters of the District. The Fire Chief (currently shared with Placer Hills Fire Protection District) oversees six full-time employees and three to four active volunteer firefighters. The NFPD is an all-risk department that provides response to all types of fires, medical emergencies, rescues, and hazardous material incidents. Additional services include a year-round fire prevention program incorporating building occupancy inspections, new building plan reviews, and a risk reduction and Public Education delivery model.

Placer County Fire Department

CAL FIRE Station No. 182 at 9305 Wise Road in Auburn, approximately 2.7 miles northeast of the project site, is jointly operated with the PCFD and provides services to the unincorporated areas of Placer County. The PCFD services are administered by the County OES and are responsible for fire protection and rescue and emergency response services for approximately 475 square miles of unincorporated area in Placer County. Fire prevention and protection in areas of Placer County not served by independent fire protection districts or municipal fire departments are provided by a combination of a contract with the CAL FIRE and eight volunteer companies, all operated by CAL FIRE under the name PCFD. Services provided include fire suppression, emergency medical, fire prevention, and rescue, among others. Additionally, PCFD, by way of its contract with CAL FIRE, conducts fire inspections and assists with land development functions within the PCFD service area. All fire agencies within Placer County operate under a mutual aid system, defined as a pre-arranged plan and contract between agencies for reciprocal assistance upon request by the first-response agency.

Currently, CAL FIRE employs 69 personnel that respond to PCFD calls for service, including 42 permanent personnel assigned to serve PCFD stations full-time.

Emergency Vehicle Access

Fire access can be described as the means by which firefighters can enter an area to quickly mitigate a wildfire incident prior to spread to adjacent properties and critical infrastructure at risk. Primary access to the project site would be provided directly from Callison Road, approximately 2,400 feet west of the Callison Road/Taylor Road intersection.

The existing roads that would serve as the primary evacuation routes during a wildfire event would include Callison Road, adjacent to the project site's southern boundary, as well as Taylor Road, Penryn Road, SR 193, and Interstate 80 (I-80) in the surrounding area.

18.3 REGULATORY CONTEXT

The following sections provide a summary of the federal, State and local regulations pertaining to wildfire that are applicable to the proposed project.

Federal Regulations

The following are the federal environmental laws relevant to wildfire.

Healthy Forest Reforestation Act

In recognition of widespread declining forest health, the Healthy Forest Restoration Act (HFRA) was passed in 2003 to expedite the development and implementation of hazardous fuel reduction projects on federal land. A key component of the HFRA is the development of Community Wildfire Protection Plans (CWPP) as a mechanism for public input and prioritization of fuel reduction projects. A CWPP provides background information about a project area, discussion of community values at risk, community base maps, a fire risk assessment, and recommendations that identify treatment areas for reducing fuels and promoting education and awareness about wildland fires, as well as monitoring and assessment strategies. The Placer County CWPP provides a comprehensive analysis of wildfire-related hazards and risks in the WUI areas covered by the Greater Auburn Area, Foresthill/Iowa Hill, Lincoln, and Placer Sierra Fire Safe Councils (FSCs) and includes recommendations to assist stakeholders in preventing and/or reducing the threat of wildfires.[13] The project site is located within the WUI covered by the Greater Auburn Area FSC.

State Regulations

The following are the State environmental laws and policies relevant to wildfire.

State Responsibility Area

Pursuant to PRC Sections 4125-4128, the Board of Forestry and Fire Protection classifies all lands in the State for the purposes of determining areas in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. The classified lands are termed SRA.

Fire Hazard Severity Zones

FHSZs are geographical areas designated pursuant to California PRC Sections 4201 through 4204 and classified as Very High, High, or Moderate in SRAs or as Local Agency Very High FHSZs designated pursuant to California Government Code Sections 51175 through 51189.

The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as “Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California.”

California Public Resources Code Section 4291

California PRC Section 4291 sets forth minimum fire safety standards for development in or adjoining WUI zones, such as mountainous areas and forest-covered lands. Provisions of California PRC Section 4291 for such development include, but are not necessarily limited to, the following:

- Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood;

[13] Placer County. *Placer County Community Wildfire Protection Plan*. December 2012.

- The roof of any structure must be free of leaves, needles, or other vegetative materials;
- Prior to constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable State and local building standards; and
- Prior to final inspection approval of any building, the fire department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with the California Building Code and fire department service requirements.

California Building Code – Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)

Chapter 7A of the California Building Code (CBC) (Title 24 CCR, Part 2) includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a WUI zone, which is defined by the CBC as a geographical area identified by the State as a "Fire Hazard Severity Zone" in accordance with the PRC Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

Chapter 7A of the CBC is intended to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within SRAs or any WUI zone to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. All new buildings to be located in a FHSZ or WUI zone designated by the enforcing agency for which an application for a building permit is submitted on or after July 1, 2008 are required to comply with Chapter 7A of the CBC. Examples of the Chapter 7A standards include, but are not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. The project site is in a WUI zone; therefore, the standards set forth by CBC Chapter 7A related to development in such areas would apply to the proposed project.

Local Regulations

The following local goals and policies related to wildfire are applicable to the proposed project.

Placer County General Plan

The Placer County Board of Supervisors adopted the 2021 Health and Safety Element Update on November 16, 2021 through Resolution 2021-359. The update includes refinements to the goals, policies, and implementation programs that address potential and existing hazards in the County, including those related to wildfire. The following goals and policies from the Placer County General Plan, including those from the 2021 Health and Safety Element Update, related to wildfire are applicable to the proposed project.

Public Facilities and Services Element

Goal 4.I To protect residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires.

Policy 4.I.1 The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as Insurance Service Organization (ISO) ratings):

a. ISO 4 in urban areas
b. ISO 6 in suburban areas
c. ISO 8 in rural areas

Policy 4.I.2 The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):

a. 4 minutes in urban areas
b. 6 minutes in suburban areas
c. 10 minutes in rural areas

Policy 4.I.3 The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

Policy 4.I.4 The County shall work with local fire protection agencies to identify key fire loss problems and design appropriate fire safety education program to reduce fire incidents and losses.

Policy 4.I.5 The County shall work with local fire protection agencies and implement ordinances to control fire losses and fire protection costs through continued use of automatic fire detection, control, and suppression systems.

Policy 4.I.7 The County shall maintain and strengthen automatic aid agreements to maximize efficient use of available resources.

Policy 4.I.8 The County shall work with local fire protection agencies to maintain a pre-fire planning program with selected high-risk occupancies reviewed at least annually.

Policy 4.I.9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.

Policy 4.I.10 The County shall work with local fire protection agencies to inventory and eliminate structurally unsafe and fire-hazardous housing units that are beyond repair or rehabilitation.

Policy 4.I.11 The County shall encourage local fire protection agencies to provide and maintain advanced levels of emergency medical services (EMS) to the public.

Health and Safety Element

Goal 8.C.1 To minimize the risk of loss of life, injury, and damage to property and watershed resources resulting from unwanted fires.

Policy 8.C.1.1 The County shall require that new development meet State, County, and local fire district standards for fire protection, including the California Building Standards Code, the International Wildland-Urban Interface Code, and the Placer County Municipal Code as applicable.

Policy 8.C.1.2 The County shall refer applicants of development projects in the unincorporated county to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied. All development in high fire hazard areas shall be designed and constructed to minimize the risk from fire hazards.

Policy 8.C.1.3 The County shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

Policy 8.C.1.4 The County shall encourage and promote installation and maintenance of smoke detectors and fire safety improvements in existing residences and commercial facilities that were constructed prior to the requirement for their installation.

Policy 8.C.1.6 The County shall continue to implement State fire safety standards through enforcement of the applicable standards contained in the Placer County Land Development Manual.

Policy 8.C.1.9 For tentative parcel maps and tentative subdivision maps located in a High or Very High Fire Hazard Severity Zone (FHSZ), the County shall require the undergrounding of new electric utilities, except in cases where the undergrounding of such utilities is infeasible or where alternative mitigation is more appropriate or provides the same level of benefit or protection. For all projects located in a Moderate FHSZ, or nonresidential projects in High or Very High FHSZ, the County shall consider all feasible fire preventative measures during environmental review. All projects shall conform to the utility requirements, as specified in applicable Community and Specific Plans, as well as all applicable design standards and guidelines.



	Policy 8.C.1.10	The County shall develop policies and provide updates, as appropriate, that ensure recovery and redevelopment after a large fire reduces future vulnerabilities to fire hazard risks through site preparation, redevelopment layout design, fire-resistant landscape planning, and fire retarding building design and materials.
	Policy 8.C.1.14	The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and television to increase public awareness of fire hazards within the county.
	Policy 8.C.1.15	The County shall work with local fire protection agencies, CAL FIRE, and the U.S. Forest Service to maintain existing fuel breaks and emergency access routes for effective fire suppression.
	Policy 8.C.1.16	The County shall work with local fire agencies to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures.
Goal 8.C.2	To manage forests in a sustainable manner that will not endanger urban areas with wildfires.	
	Policy 8.C.2.1	The County shall continue to work cooperatively with the US Forest Service, CAL FIRE, and local fire protection agencies in managing wildland fire hazards.
	Policy 8.C.2.5	The County shall implement the adaptation strategies as contained in the Placer County Sustainability Plan necessary to support forest are managed in a sustainable manner in consultation with federal, state, and local agencies that will not endanger urban areas with wildfires.
Goal 8.E.1	To ensure the maintenance of an Emergency Management Program to effectively prepare for, respond to, recover from, and mitigate the effects of natural, human-made, or technological disasters.	
	Policy 8.E.1.1	The County shall continue to maintain, periodically update, and test the effectiveness of its Emergency Operations Plan.
	Policy 8.E.1.2	The County shall continue to provide promotional programs that inform the general public of emergency preparedness and disaster response procedures.

Policy 8.E.1.3 The County shall maintain an emergency operations center to coordinate emergency response, management, disaster planning, and recovery activities.

Policy 8.E.1.4 The County shall provide alerts about potential, developing, and ongoing emergency situations through extensive alert and warning systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible.

Policy 8.E.1.6 The County shall continue to coordinate emergency preparedness, response, recovery, and mitigation activities with special districts, service agencies, voluntary organizations, cities within the County, surrounding cities and counties, and state and federal agencies.

Policy 8.E.1.7 The County shall monitor the effectiveness of public safety, preparedness, and hazard mitigation policies under changing climate conditions. The County shall regularly update all appropriate planning documents, including the Public Health and Safety Element and the Local Hazard Mitigation Plan, to continue to protect the community as local conditions change.

Goal 8.E.3 To ensure that medical and public health systems proactively address human health hazards and inequities in the community.

Policy 8.E.3.1 The County shall establish an evacuation planning program to assist people to evacuate during hazardous events.

Policy 8.E.3.3 The County shall work with local water and wastewater districts to ensure that they have a plan and infrastructure for providing adequate service, treatment ability, and storage capacity as needed during and immediately after an emergency, including a wildfire event.

Horseshoe Bar/Penryn Community Plan

The following goals and policies from the HBPCP related to wildfire are applicable to the proposed project.

Public Facilities and Services

Goal 5 Ensure that the rate of development shall not exceed the capacity of County, community, special districts (including school districts), and utility companies to provide all needed public services in a timely, orderly, and economically feasible manner.

Fire Protection

Policy 2 Control fire losses and fire protection costs through continued emphasis upon automatic fire detection, control

	and suppression systems. For development on mesas, ridgelines, and hilltops, appropriate setbacks from slopes are a preferred mitigation measure for fire hazards.
Policy 3	Continue and strengthen automatic fire aid agreements to take maximum advantage of cost savings and improved services available through the joint use of existing public resources.
Policy 6	Maintain strict enforcement of the County Zoning and Subdivision Ordinances, Uniform Building Code and the Uniform Fire Code.
Policy 7	Ensure that all new developments comply with the California Department of Forestry fire safe regulations, County development standards, and other local fire agency standards regarding the adequate provision of water supply and emergency vehicle accessibility.

Placer County Code

The following applicable codes related to wildfire are from the Placer County Code.

Building Code

Buildings constructed within the project site would be subject to the current building standards found in both the CBC and Chapter 15 of the Placer County Code. The PFPD enforces standards associated with the installation of automatic fire sprinkler systems and the installation of Class A roofing materials. Both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

Fire Code

Placer County has adopted the CFC (Title 24 CCR, Part 9) (Sections 15.04.510 [Fire Code Adopted] and 15.04.520 [Fire Code Amended]). The CFC addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet (sf) and larger.

Fire Prevention Code

Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of “fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. Chapter 9, Article 9.32, Part 4 of the Placer County Code requires that hazardous vegetation be abated on unimproved parcels in the County. Abatement of hazardous fuels is required if the unimproved parcel is adjacent to an improved parcel where implementation of required defensible space would extend onto the unimproved parcel. Abatement is also required along roads if, in the opinion of the County fire warden, the presence of hazardous fuels constitutes a potential obstacle to emergency access.

Placer County Office of Emergency Services

Placer County's OES provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of the OES include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan (LHMP). The currently adopted Placer County LHMP, which was updated in 2016,[14] is a joint effort between Placer County and 15 other jurisdictions, and is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

Placer County Local Hazard Mitigation Plan

The 2016 LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Placer County would be eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs, as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries. The purpose of the LHMP is to guide hazard mitigation planning and to better protect the people and property of the County from the effects of hazard events. The LHMP demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decisionmakers direct mitigation activities and resources.

A draft Placer County 2021 LHMP Update was submitted for review to both CalOES and FEMA at the end of June 2021. On September 3, 2021, FEMA transmitted an Approval Pending Adoption letter which stipulated that the Placer County 2021 LHMP Update met all the regulatory requirements and was eligible for final adoption. The Placer County Board of Supervisors adopted the Placer County 2021 LHMP on November 16, 2021. The goals of the 2021 LHMP are as follows:

- Goal 1: Minimize risk and vulnerability of Placer County to the impacts of natural hazards and protect lives and reduce damages and losses to property, economy, public health and safety, and the environment;
- Goal 2: Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts;
- Goal 3: Improve public awareness, education, communication, and preparedness for all hazards;
- Goal 4: Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event;
- Goal 5: Ensure a more resilient County that can adapt to the hazards created or exacerbated by Climate Change;
- Goal 6: Reduce fire severity and mitigate undesirable fire outcomes in Placer County; and
- Goal 7: Maintain FEMA Eligibility/Position the communities for grant funding.

Placer County and Placer Operational Area Emergency Operations Plan

The Placer County and Placer Operational Area Emergency Operations Plan (EOP) provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated Placer County.[15] The EOP is applicable to any natural disaster or

[14] Placer County. *Local Hazard Mitigation Plan Update*. March 2016.
[15] Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan.* Adopted December 14, 2010.

manmade emergency occurring in or in the proximity of Placer County that affects, or may affect, the unincorporated area of the County (or the entire operational area, should response require coordination of the emergency response efforts of multiple agencies or jurisdictions). Emergency events range from minor oil spills, brush fires and minor flooding to severe winter storms, floods, wildland fires, and earthquakes to countywide public health emergencies, all of which have potentially catastrophic long-term public safety, economic, social and political implications.

Placer County Community Wildfire Protection Plan

The Placer County CWPP is the result of a communitywide planning effort that included extensive field data gathering, compilation of existing documents and geographic information system (GIS) data, and scientific analyses and recommendations designed to reduce the threat of wildfire-related damages to values at risk. The CWPP provides valuable information related to wildfire to citizens, policymakers, and public agencies throughout western Placer County. The primary goal of the CWPP is to protect human life, private property, essential infrastructure, and natural resources through the implementation of fire prevention projects that work to increase public awareness, improve forest health, sustain local wildlife and preserve the natural beauty of the area through a shared responsibility concept. To that end, the CWPP identifies recommendations to aid stakeholders in preventing and/or reducing the threat of wildfire in the County.

Placer County Sustainability Plan

The County adopted the Placer County Sustainability Plan (PCSP): A Greenhouse Gas Emission Reduction Plan and Adaptation Strategy on January 28, 2020. The primary goal for the adaptation component of the PCSP is to create a resilient Placer County that can adapt to the hazards created or exacerbated by climate change. To accomplish this goal, the PCSP provides several goals, strategies, and actions that promote coordination among agencies, protection of buildings, and implementation of mitigation measures to reduce wildfire activity in the County. The following PCSP strategies and actions are related to wildfire.

Strategy WF-5

Require all new large development projects in Moderate, High, or Very High Fire Hazard Severity Zones to have multiple points of ingress and egress to improve evacuations and emergency response access.

Strategy WF-7

Explore requiring fire-safe improvements before issuing a building permit or other formal approval for significant retrofits to buildings in identified Very High and High Fire Hazard Severity Zones, including installation of sprinklers and fire-safe exterior materials as feasible.

Action 1

Coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to encourage new and existing planned developments in the WUI and other areas with elevated wildfire risk to join the Placer County Firewise Communities program.[16]

[16] The Placer County Fire Safe Alliance provides community assistance, information, and education programs in an effort to reduce the risks of wildfire danger to life and property in the County and is comprised of various members, including, but not limited to, Placer County; CAL FIRE; U.S. Bureau of Land Management; U.S. Bureau of Reclamation; and the Greater Auburn Area, Foresthill/Iowa Hill, Lincoln, and Placer Sierra FSCs. Through the County's Firewise Communities Program, Placer County is a member community of the NFPA's Firewise USA Program, which is aimed at homeowners and provides specific criteria for communities regarding wildfire

18.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to wildfire. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, Section XX, Wildfire, and Placer County's Environmental Checklist, determination of significant impacts related to wildfire is based on whether the proposed project would result in the following, if located in or near SRAs or lands classified as Very High FHSZs:

- Substantially impair an adopted emergency response plan or emergency evacuation plan.
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Method of Analysis

The impact analysis contained in this chapter is based on a review of available CAL FIRE wildfire hazard mapping and recent wildfire history within Placer County. In addition, State and local fire hazard regulations were evaluated to identify applicable design requirements for the proposed project to minimize wildfire risk (e.g., defensible space). Raney Planning & Management, Inc. also directly contacted the PFPD and County Building Official for additional information and to confirm the fire agency responsible for responding to a wildfire at the project site.[17]

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

18-1 Substantially impair an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact is *less than significant*.

Emergency events, such as wildland fires, are unpredictable. The location of the fire, the time of day an event occurs, the direction of travel, and the rate of spread are unknown. Due to such uncertainty, the use of traditional capacity analysis, such as AM and PM peak hour operations at study intersections, is limited for the analysis of emergency events. Furthermore, while Placer County has an adopted LHMP and

preparedness. The program provides resources to help homeowners learn how to adapt to living with wildfire and encourages neighbors to work together to take action to prevent losses.

[17] D'Ambrogi, Mark, Fire Marshal, Placer Hills/Newcastle/Penryn Fire Protection Districts. Personal Communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc., August 4, 2022.
Wegner, Timothy, Chief Building Official, Placer County Community Development Resource Agency. Personal Communication [email] with Nick Pappani, Vice President, Raney Planning & Management, Inc., August 4, 2022.

EOP, which are both intended to provide emergency resources and plans in response to local hazards, such as wildfires, the County does not have an adopted emergency evacuation plan. However, in the event of an emergency, emergency responders do have measures that can be deployed to aid in the movement of the public from danger. For instance, during evacuation events, State and/or local emergency responders provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. Such measures would be initiated in the event that an evacuation is deemed necessary.

For the purposes of this analysis, Callison Road, the existing road adjacent to the project site, and Taylor Road, east of the project site, would serve as the primary evacuation routes during a wildfire event. In addition, Penryn Road, SR 193, and I-80 in the surrounding area would also serve to assist in evacuating patrons and employees of the proposed project.

The Circulation Plan Diagram in the County's General Plan (Figure 1-8 of the General Plan) depicts the circulation system for the unincorporated portions of the County, with roadways shown by means of a set of roadway classifications. Roadways are classified based on the linkages they provide and their function, both of which reflect their importance to land use patterns, travelers, and the public's general welfare. The County's roadway system classifies roadways into the following hierarchy: local streets, collector roadways, arterial roadways, thoroughfares, and expressways. In general, roadways higher in the hierarchy are meant to collect traffic from roads lower in the order.

As discussed in Chapter 16, Transportation, of this EIR, according to the Transportation Impact Analysis (TIA) prepared for the proposed project by KD Anderson & Associates, Inc., Callison Road is currently a local two-lane rural road that provides access to the rural area north of the community of Penryn. The road does not include shoulders and the pavement width of the road ranges from 16 to 24 feet. Callison Road extends west from Taylor Road for approximately 1.33 miles to Clark Tunnel Road. Between Taylor Road and Clark Tunnel Road, Callison Road proceeds across a Union Pacific Railroad (UPRR) gated crossing approximately 2,300 feet to the west of Taylor Road and then intersects with the private driveway that provides access to the project site. Taylor Road is a major arterial street that runs parallel to I-80 and links the project site with Penryn, the Town of Loomis, the City of Rocklin to the west, and with the communities of Newcastle, Ophir, and the City of Auburn to the east. Taylor Road is generally a two-lane road. In the project vicinity, Taylor Road has one travel lane in each direction and separated turn lanes at most major intersections.

Callison Road primarily serves to route vehicles to Taylor Road, where vehicles would then be routed to roads higher in the County's classification hierarchy, such as I-80. Although development of the proposed project would add additional vehicles to Callison Road, project-related traffic is not anticipated to lead to substantial roadway congestion such that potential impacts would occur in the event that all patrons of the project, as well as residents of the single-family homes surrounding the project site, evacuate the area at the same time. The Local Traffic Operational Analysis (LTA) prepared for the proposed project by KD Anderson & Associates, Inc. included an evaluation of roadway level of service (LOS). LOS represents a qualitative description

of the traffic operations experienced by the driver at an intersection or along a roadway segment and ranges from LOS A, which represents the absence of congestion and little delay, to LOS F, which signifies excessive congestion and delays. The County's standard for acceptable LOS along Callison Road is LOS C. As detailed in Table 4 of the LTA, the segments of Callison Road that extend from Clark Tunnel Road to Taylor Road currently operate at LOS A or B. As presented in Table 19 of the LTA, the aforementioned segments of Callison Road would continue to operate at acceptable LOS A or B under Existing Plus Project conditions. Therefore, Callison Road would continue to meet the County's standard for LOS following buildout of the proposed project. As such, project-related traffic would not result in substantial congestion on Callison Road that would lead to potential impacts in the event of evacuation from the project area.

In addition, as detailed in the TIA, in April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, requiring new development within the County to address adverse effects to the roadway system through payment of traffic impact fees. The fees collected through the program, in addition to other funding sources, allow the County to construct roads and other transportation facilities and improvements needed to accommodate new development. The fee was updated by Placer County in August 2021.

The County's fee program and Capital Improvement Program (CIP) are divided into 11 districts. The project site is located in two districts, with 79 percent of the project footprint (including 100 percent of the occupied structures) within the Placer Central Benefit District and 21 percent of the project footprint located in the Newcastle/Horseshoe Bar/Penryn Benefit District. Pursuant to guidance by the Placer County Department of Public Works, the applicable fee district is based on the location of construction.

Current roadway improvements planned in the project vicinity are presented in Table 16-2 included in Chapter 16, Transportation, of this EIR. Based on the planned CIP improvements shown in the table, project vicinity roadways, including Taylor Road, Penryn Road, and SR 193, are scheduled for improvements that would allow for traffic volumes generated by the Newcastle/Horseshoe Bar/Penryn District, including the proposed project, to be better accommodated. As such, in the event that a wildfire was to occur in the project region, project vicinity roadways would be able to accommodate project-related traffic, which would help prevent substantial congestion that could lead to potential impacts in the event of evacuation from the project area.

Furthermore, pursuant to County requirements, the proposed project would reconstruct about 500 feet of Callison Road at the project site entrance to create two 12-foot-wide travel lanes and four-foot shoulders on each side of the road (see Figure 3-8 in the Project Description chapter of this EIR). The portion of Callison Road directly in front of the main entrance to the site would also be raised approximately three feet to be consistent with the County's required sight distance standard (see Section H in Figure 3-9 in the Project Description chapter). Circulation through the site would be accommodated by a new roundabout north of the main entry, which would be a minimum of 100 feet in diameter and lead to a gated entry north of the roundabout. The roundabout would provide a turnaround area in front of the gate. A 23-foot-wide paved, private driveway with two-foot shoulders on each side would extend into the

site from the gate, providing access to the proposed processing/warehouse building and continuing to the octagon building, where an additional roundabout would be provided to allow a directional change for larger vehicles. The aforementioned improvements, in conjunction with the planned CIP improvements listed above, would aid in the event that evacuation of the project site during a wildfire is necessary. Furthermore, during evacuation events, emergency responders could provide active traffic control at intersections, and may close roads, provide detours for through traffic, and/or actively manage available travel lanes to facilitate evacuation away from the emergency.

In the event of a wildfire, future patrons of the proposed project would be provided sufficient warning through the Placer Alert system, a component of a partnership between public safety agencies in Placer, Sacramento, and Yolo counties to alert residents about emergency events and other important public safety information through a community notification system. The system enables the Placer County Sheriff's Office to provide the public with critical information quickly in a variety of situations, such as severe weather, unexpected road closures, and evacuations of buildings or neighborhoods. All members of the public can sign up for Placer Alert through the Placer County Sheriff's Office website and elect to receive notifications of emergency situations through various means, including text messages and email.

During wildfire events, emergency responders would be able to access the project site to combat fires, which would serve to reduce the hazardous conditions that precipitate the need for evacuation of patrons and employees. As discussed, the private driveway that would provide access to the proposed structures would be wide enough to accommodate emergency vehicles.[18] Accordingly, the proposed project would provide adequate emergency access to the project site and would not be expected to conflict with any potential evacuation routes.

While the proposed project would include a gated entry from Callison Road (see Figure 3-3 in the Project Description chapter of this EIR), the gated access point would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code. Section 15.04.580 requires that emergency vehicles be provided access at gated entries through inclusion of an override switch and an approved emergency radio frequency gate opening device. Therefore, the proposed gated entry would not impair emergency vehicles from accessing the site in an emergency event. Emergency vehicles would be expected to primarily come from Station 182 at 9305 Wise Road in Auburn. From the station, emergency vehicles would proceed southward to eventually connect to Taylor Road, where they would then proceed westward at the Callison Road/Taylor Road intersection. From Callison Road, emergency vehicles would access the project site through the proposed gated entrance. Given that Station 182 is 2.7 miles northeast of the project site, emergency vehicles would be anticipated to arrive on-site within a timely manner.

During project construction, temporary lane closures on Callison Road could be required; however, as required by Mitigation Measure 16-1 in the Transportation

[18] D'Ambrogi, Mark, Fire Marshal, Penryn Fire Protection District. Personal Communication [email] with Evan MacKenzie, Engineering Manager, BEM, May 16, 2022.

chapter of this EIR, any temporary lane closures would be coordinated with County OES, the Placer County Engineering and Surveying Division, and local emergency services providers. Furthermore, complete closure of Callison Road is not anticipated.

Based on the above, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

18-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The project site is located within and adjacent to the northwest portion of the HBPCP area and contains a segment of the Antelope Canal and agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The following discussions evaluate the potential impacts associated with the proposed project related to the exacerbation of wildfire risks due to factors such as on-site fuel sources, slope, and prevailing winds.

Wildfire Risks Due to Existing On-Site Fuel Sources

CEQA Guidelines Appendix G indicates that the extent and nature of on-site vegetation, which would serve as fuel for a wildfire, should be evaluated to determine the potential for a project to exacerbate wildfire risk. Portions of the project site have been previously disturbed as part of the site's agricultural uses, dirt roadways, and graded surfaces, which has resulted in the removal of a substantial portion of the on-site vegetation. However, the northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. In addition, areas surrounding the site also currently contain grassland and trees. Implementation of the proposed project would include site clearing activities, which would remove on-site vegetation, including 4.2 acres of the blue oak woodland associated with the hilltop and 1.7 acres of the on-site annual brome grassland. As such, development of the site with the proposed uses would reduce the risk of wildland fire to surrounding areas, because site improvements, such as the internal driveway and irrigated on-site landscaping, would reduce readily combustible vegetation and act as a fuel break. Additionally, wildfire risks would not be anticipated to be exacerbated during project operation, as winery uses typically do not involve operation components that would increase the risk of wildfire, and most of the wildfire risk has been reduced through vineyard plantings.

More specifically, the proposed project would reduce on-site fuel sources through the development of a full production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities, on approximately 17.96 acres of the 44.14-acre parcel area. The

aforementioned components would include a 29,250-sf octagon building, which would sit atop the on-site hilltop, and an associated 67-stall parking lot, both of which would require removal of existing on-site oak woodlands and grassland. In addition, the internal driveway and northerly roundabout would also require removal of oak woodlands and grassland. The proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including Placer County Code Sections 15.04.510 and 15.04.520, which serve to adopt and amend, as applicable, the CFC. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new commercial buildings 3,600 sf and larger. Fire flow for the proposed project would be provided by the agricultural water system that is already in place for the adjacent vineyards, or by installing an underground water storage tank within the landscape area in front of the proposed warehouse building.

In addition, Chapter 7A of the CBC includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a WUI zone. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within SRAs or any WUI zone to resist the intrusion of flames or burning embers projected by a vegetation fire, thereby systematically reducing conflagration-related losses. Examples of the Chapter 7A standards include use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. As the project site is located within a FHSZ in a SRA and is also within a WUI zone, the proposed project would be subject to CBC Chapter 7A standards. Furthermore, Placer County Code Section 9.32.160 sets forth hazardous vegetation abatement standards for improved parcels with which the proposed project would be required to comply. As part of compliance, the project would be required to maintain a 100-foot defensible space around all proposed structures. Finally, the proposed roundabout north of the main site entrance would include a landscaped planter area. Pursuant to Placer County Code Section 15.75.040, the landscaping would include irrigation scheduling in accordance with the County's Water Efficient Landscape Ordinance (WELO), which would ensure the proposed vegetation is sufficiently watered to not result in excessively dry fuel sources.

Overall, because the proposed project would remove existing fuel sources and would comply with State and local requirements, operation of the project would not exacerbate the risk of a wildfire spreading from undeveloped land to the proposed structures or the potential of fire spreading from the site to surrounding areas. However, during project construction, equipment without appropriate spark arrestors could result in direct flame impingement on combustible materials, such as existing on-site vegetation or building construction supplies. Without proper measures to require equipment used during construction activities to be equipped with CAL FIRE-approved spark arrestors, project construction could result in the ignition of on-site fuel sources, which could exacerbate wildfire risks due to on-site vegetation and building construction supplies, thereby exposing residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and a significant impact could occur.

Wildfire Risks Due to Slope

As discussed above, while steep slopes and canyons are located north of Penryn and to the south of SR 193, overall, Penryn does not contain steep slopes or significant slopes, such as those in steep-walled canyons or mountainous valleys. As such, wildfire risks related to topography are limited in the project region. Within the parcel area, the terrain gently slopes downward from the east towards the west, with the exception of the northern portion of the project site, where the terrain rises towards the crest of a knoll. Pursuant to information provided directly by the PFPD Fire Marshal, the primary risk area is the upper hilltop. However, both the octagon building and associated parking area would replace existing fuel sources on the upper limit of the hill, which currently consist of oak woodlands and grasses. As such, wildfire risk would be reduced following project construction in the primary on-site risk area.

Nonetheless, as discussed further in the Geology and Soils chapter of this EIR, the maximum gradient of the project site consists of a 3:1 slope. In such areas, the land surface would decline by one foot for every three feet of horizontal distance, which would be considered moderately steep. Thus, while the majority of the site consists of gently sloping terrain, without vegetation management activities to reduce fuel sources in the site's steepest areas, the proposed project could exacerbate wildfire risks due to slope, and a significant impact could occur.

Wildfire Risks Due to Prevailing Winds

With respect to prevailing winds at the project site, as previously discussed, winds from the south are most dominant from mid-February through mid-March. In addition, some winds occur from the east during summer months. The predominant direction of prevailing winds suggests that, during the majority of the year, winds could be reasonably assumed to facilitate spread of fire towards the north of the site, where the slope increases towards a hilltop and, beyond which, where primarily undeveloped land is located. Additionally, a fire burning to the east of the project site, where scattered residences and oak woodlands are located, could potentially move towards the project site, which could then spread to residences located to the west. However, the risk of easterly fires spreading to westerly areas is reduced by graded areas throughout the parcel area. In addition, according to the PFPD Fire Marshal, vineyard plantings throughout the parcel area additionally reduce the risk of wildfire.

As discussed above, a portion of the on-site fuel sources would be removed as part of development of the proposed project. In addition, the project would comply with State and local standards and regulations associated with prevention of wildfire hazards, including Placer County Code Sections 15.04.510 and 15.04.520, which serve to adopt and amend, as applicable, the CFC, as well as Chapter 7A of the CBC. The removal of on-site vegetation and compliance with applicable standards and regulations would reduce the proposed project's potential of exacerbating wildfire risk due to prevailing winds during project operation.

Conclusion

Based on the above, the project could exacerbate wildfire risks due to prevailing winds, slope, and other factors, and the project could thereby expose residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

18-2 *In conjunction with the submittal of and prior to the approval of Improvement Plans, the applicant shall submit a Vegetation Management Plan (VMP) for review and approval by CAL FIRE, PFPD, PCFD, and Placer County Community Development Resource Agency. The VMP shall identify roles, responsibilities, and financial resources to ensure successful implementation. The VMP shall be implemented by the project developer and maintained in perpetuity by the winery owner and may include, but not necessarily be limited to, the following:*

- *Management of Vegetation During Project Construction or Adjacent Construction:*
  - *Prior to construction activities, all vegetated boundaries shall be designated by placing high visibility construction fencing and/or silt fencing. Fencing shall be maintained in good condition until permanent post and cable fencing can be installed.*
- *Vegetation Maintenance*
  - *Ongoing Fuel Load Management activities shall focus on areas close to structures or on borders, as approved by the County, and include activities to mow or otherwise manage annual grasses, remove dead and/or diseased trees, snags, and debris, limb live trees up to a height of 10 feet above ground where feasible, and remove understory fuels over one foot in height, where feasible. The use of goats shall be the preferred method of reducing vegetation materials; alternative methods, such as plastic string weed trimmers or other County-approved equipment may be acceptable, but shall be limited to the maximum extent feasible. Chipping of material shall be permitted. Chipped material shall be removed from the site unless otherwise approved by the County. Prescribed burning shall be prohibited and herbicide use shall not be allowed within the fuel load reduction area; and*
  - *Annual monitoring memos shall be submitted to the County by June 30 of each year. The memos shall include, at a minimum, the following:*
    - *An assessment of dead vegetative matter (thatch) and management recommendations, if needed; and*
    - *An evaluation of general site conditions and recommendations for remedial fuel reduction actions to be included in the annual monitoring memo.*

18-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Based on the analysis below, the impact is *less than significant*.

The proposed project would include installation of various infrastructure components, including a private driveway; roundabouts; a new 1,200-amp, 480-volt, 3-phase power main; a 900-sf outdoor, covered utility pad built into the hillside; a backup diesel or propane generator, and other utilities. All potential physical environmental impacts that could result from implementation of the proposed project have been evaluated throughout the technical chapters of this EIR.

The proposed roadways would not exacerbate fire risks, as the Placer County Code requires a 10-foot vegetation clearance next to roadsides to reduce fire hazards. Additionally, a portion of the existing overhead power and communication lines that traverse the site are being relocated underground by PG&E in order to reduce fire risk and enhance visual appearance (see Figure 3-10 in Chapter 3, Project Description, of this EIR). Undergrounding activities, which are separate from the proposed project, are anticipated to be completed by November 2022. Through implementation of Mitigation Measure 18-2, project operation would include ongoing fuel load management activities in areas close to structures or on borders and involve activities to mow annual grasses, remove dead and/or diseased trees, snags, and debris, limb live trees up to a height of 10 feet above ground where feasible, and remove understory fuels over one foot in height, where feasible. Furthermore, as discussed above under Impact 18-2, structures constructed as part of the proposed project would comply with all applicable standards set forth by the CBC and CFC, including standards set forth in CBC Chapter 7A, which requires the use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors for structures built within a WUI. Therefore, the proposed infrastructure improvements associated with the project would not substantially exacerbate wildfire risk.

The proposed project would also be subject to the applicable provisions set forth in Placer County Code Section 9.32.160, which contains hazardous vegetation abatement standards for improved parcels. As part of compliance, the project would be required to maintain a 100-foot defensible space around all proposed structures. Furthermore, Placer County Code Section 15.04.630 sets forth the minimum fire flow requirements. Long-term maintenance and operation of the emergency water supply infrastructure would not involve any activities that would result in an increase in wildfire risk.

While the long-term maintenance of the proposed roadways, emergency water supply connections, power lines, and other utilities would not exacerbate fire risks, the activities associated with the initial construction and placement of the utilities and infrastructure could cause a temporary increase in fire risks due to the use of heavy equipment, which would contain combustible materials such as fuels and oils and ignition sources. However, the project contractor would be required to comply with all

California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous materials, which would help to minimize the potential for accidental conditions, including fire. Furthermore, the requirements set forth by Mitigation Measure 18-2 provide that, prior to commencement of construction, all vegetated boundaries must be designated through the placement of high visibility construction fencing and/or silt fencing. Compliance with Mitigation Measure 18-2 would reduce the fire risk during project construction activities.

Based upon the above, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

18-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Based on the analysis below, the impact is *less than significant*.

Wildfires alter landscapes and can result in post-event hazards triggered primarily by rainfall. Rainfall that is normally captured and stored by vegetation can run off almost instantly, causing creeks and drainage areas to flood much sooner during a storm and with more water than is expected under unburned conditions. Soils burned at moderate and high severity tend to have reduced infiltration capacity and are more easily eroded. The potential post-fire flooding, soil erosion, and debris flows can impact recreational areas, homes, structures, roads, and other infrastructure within, adjacent to, and downstream from burned areas.

Wildfire-related flooding and increased runoff may continue for several years in a burn area. However, post-fire debris flows do not typically occur beyond the second rainy season. Some of the largest debris-flow events happen during the first post-fire storm season. While multiple factors can affect debris-flow occurrence, post-fire debris flows generally are triggered by one of two processes: surface erosion caused by rainfall runoff; and landsliding caused by rainfall seeping into the ground. Surface erosion runoff processes are by far the most prevalent contributors to debris flows. Landsliding contributes less to fire-related debris flow, but prolonged heavy rains may increase soil moisture even after a wildfire.[19] The wetted soil can then fail, producing infiltration-triggered landslides. The landslides could be shallow or deep-seated (i.e., greater than 10 to 15 feet deep).

[19] U.S. Geological Survey. *Post-Fire Flooding and Debris Flow*. Available at: https://www.usgs.gov/centers/ca-water/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects. Accessed March 2022.

As previously discussed, while the terrain in the northern portion of the project site slopes to the north towards a knoll, the project site does not feature steep or significant slopes, nor is the site adjacent to such features. For comparison's sake, the steep-walled canyons located north of Penryn and to the south of SR 193 would better meet the definition of steep or significant slopes. Given the project site does not contain such features, the proposed project would not be vulnerable to risks such as post-fire downslope flooding or landslides or post-fire slope instability. Additionally, while the northern portion of the project site contains oak woodlands and grassland, through development of the proposed project, a portion of such vegetation would be removed as part of site improvements, thereby reducing the potential for substantial fire-burned areas to occur on-site.

The project site is bisected by Antelope Canal, which is owned by Placer County Water Agency (PCWA). The canal traverses the entire project site, from east to west, and is fed by the Dutch Canal. Separate from the project and prior to project construction, the on-site portion of Antelope Canal would be encased within a 48-inch high-density polyethylene (HDPE) pipe. Canal encasement would include concrete inflow and outflow structures with trash/safety racks. In the event that a fire was to occur on-site, the encasement would reduce the potential for substantial amounts of sediment to be transported to the canal by way of post-fire runoff. In addition, as discussed under Impact 12-4 in the Hydrology and Water Quality chapter of this EIR, through incorporation of Mitigation Measures 12-4(a) through 12-4(c), the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in significant impacts related to on-site or off-site flooding, exceeding the capacity of stormwater drainage systems, and/or generating substantial additional sources of polluted runoff. As part of mitigating the potential impact, Mitigation Measure 12-4(a) requires the submittal of a final drainage report in conformance with the requirements set forth in Section 5 of the Placer County Land Development Manual. Furthermore, as discussed above, the proposed project would be required to comply with all applicable CBC and CFC standards and regulations. Implementation of all of the aforementioned measures and standards would ensure that the proposed project's wildfire risks are reduced to the maximum extent feasible. As such, the proposed project would not significantly alter the existing drainage pattern of the site and would, therefore, not expose people or structures in the project vicinity to risks such as downstream flooding as a result of post-fire drainage changes.

Based on the above, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the

change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For more details regarding the cumulative setting, refer to Chapter 20, Statutorily Required Sections, of this EIR.

18-5 Increase in wildfire risk attributable to the proposed project, in combination with cumulative development. Based on the analysis below, the cumulative impact is *less than significant*.

The cumulative setting for this EIR encompasses the Bickford Ranch Specific Plan (BRSP) area and the HBPCP area. Future development within the BRSP and HBPCP areas would result in changes to the existing land use environment through conversion of vacant land to developed uses that would result in a reduction of existing vegetation. The BRSP is a County-approved master planned community anticipated for implementation over three phases on 1,942.5 acres located west of project site. At buildout, the BRSP would generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. Additionally, the HBPCP includes an area of approximately 25 square miles located west and south of the project site.

Development of the BRSP would change the existing landscape of the plan area from vacant land to an intensively developed residential area. Additionally, while the HBPCP plan area is characterized by existing rural residential development across small acreages, buildout of the HBPCP would remove portions of the existing oak woodland and grassland habitats that intermix with the plan area's agricultural fields. Similar to the project site, the BRSP and HBPCP areas are located within the Moderate FHSZ in an SRA. Thus, as with the proposed project, development associated with the BRSP and HBPCP would be required to comply with defensible space standards, pursuant to California PRC Section 4291, and other wildfire risk minimization standards set forth in Chapter 7A of the CBC, including, but not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors. All buildings would be required to meet CFC requirements as set forth by the County and the CBC and CFC, which could include fire sprinklers and fire alarms, as determined by the County Fire Marshal at building permit stage, depending upon building and occupancy type. Furthermore, Chapter 9, Article 9.32, Part 3 of the Placer County Code requires the maintenance of "fire breaks" around structures and the clearing of roofs to prevent structural fires in the WUI. Compliance with State and local standards would minimize wildfire risk at each of the project locations. In addition, buildout of the BRSP and HBPCP would remove existing fuel sources, thereby reducing the cumulative risk of wildfire hazards. It should be noted that, as detailed in the 2015 BRSP Development Agreement, the BRSP would include construction of a new fire station on a 1.4-acre site within Parcel PF-1 of the BRSP area, adjacent to Sierra College Boulevard. Construction of the fire station would commence, at the latest, by the time of issuance of the 1,000th residential building permit for the BRSP, and would be required to be completed within 12 months. Development of the new fire station within the BRSP area could improve fire response times at the project site under cumulative conditions.

As discussed under Impact 18-1, the LTA prepared for the proposed project by KD Anderson & Associates, Inc. includes an LOS analysis of project vicinity roadways. According to Table 26 of the LTA, the segments of Taylor Road that extend from English Colony Way to the community of Newcastle would operate at LOS A under Cumulative Plus Project conditions. Similarly, the segments of Callison Road that extend from Clark Tunnel Road to Taylor Road would operate at LOS A or B under Cumulative Plus Project conditions. The County's acceptable LOS standard for both roads is a minimum of LOS C. As such, both Taylor Road and Callison Road would be expected to have ample capacity in the event of an evacuation under Cumulative Plus Project conditions.

Additionally, as set forth by Mitigation Measure 18-2, the proposed project would be required to implement a VMP that would include management of on-site fuel sources during project construction and ongoing management of vegetated areas during project operation. The VMP requires, among other things, that during project construction and adjacent construction, open space areas be clearly delineated so that minimal damage occurs to natural habitats, and that during project operation, ongoing maintenance of vegetated areas is completed, in part, through the grazing by goats.

Based on the above, the proposed project with implementation of the VMP required by Mitigation Measure 18-2, in combination with buildout of the BRSP and HBPCP areas, would have a ***less-than-significant*** cumulative impact related to exacerbating wildfire risk.

Mitigation Measure(s)

None required.

19. Effects Not Found to be Significant

19. EFFECTS NOT FOUND TO BE SIGNIFICANT

19.1 INTRODUCTION

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant and therefore were not discussed in detail in the EIR. The Effects Not Found to be Significant chapter of this EIR summarizes environmental issues that were determined not to be significant with implementation of the proposed project. The reasons for the conclusion of non-significance are provided for each issue area, as applicable, below.

19.2 AESTHETICS

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue area:

- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.

Officially designated State Scenic Highways are not located in Placer County. Therefore, the proposed project would not substantially damage any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a State Scenic Highway.

19.3 GEOLOGY AND SOILS

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue area:

- Result in exposure of people or property to geologic and geomorphological (i.e., Avalanches) hazards, such as earthquakes, landslides, mudslides, seismic-related ground failure or similar hazards;
- 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; and
- 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.

Impacts related to earthquakes, landslides, mudslides, seismic-related ground failure and similar hazards are addressed and analyzed in Chapter 10, Geology and Soils, of this EIR. However, as stated in the Placer County General Plan EIR, "Increased development in […] areas in high elevation areas of the east county subject to heavy snowfalls on steep slopes could potentially be affected by avalanches."[1] Due to the fact that the project site is located within the western portion of Placer County, snowfall would not occur in the project vicinity to the extent that impacts related to avalanche could occur.

[1] Placer County. *Countywide General Plan EIR* [pg. 9-4]. July 1994.

According to the California Department of Conservation's Mineral Land Classification of Placer County, known mineral resources zones of significance, documented mines, or prospects do not exist on the project site.[2] In addition, the Placer County General Plan does not identify the project site as an acceptable location for mineral extraction. Rather, the Placer County General Plan designates the site as Rural Residential, and the site is zoned Farm Building 20-Acre Minimum and Residential Agricultural Building 100,000-square-foot Minimum. Therefore, development of the project site has already been anticipated by the County. Furthermore, surface mining at the project site would not be compatible with the existing surrounding land uses, which include rural residences. Therefore, development of the proposed project would not 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, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

19.4 HAZARDS AND HAZARDOUS MATERIALS

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue areas:

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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; and
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

The closest school to the project site, Penryn Elementary School, is located approximately 1.3 miles to the southwest. Thus, the project site is not located within one-quarter mile of an existing or proposed school. In addition, the proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and is not located within two miles of a public or public use airport. The closest public use airport to the project site is the Auburn Municipal Airport, which is located approximately 12 miles northeast of the site. The project site is not located in the vicinity of any private airstrips. As such, the aforementioned impacts related to hazards and hazardous materials would not occur.

19.5 HYDROLOGY AND WATER QUALITY

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue areas:

- Place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would:
    - Impede or redirect flood flows;

[2] California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification of Placer County, California*. 1995.

- Expose people or structures to risk of loss, injury or death involving flooding; or
- Risk release of pollutants due to project inundation.

Although the proposed project would involve the construction of new structures, the project site is not located within a 100-year flood hazard area. The entirety of the project site is within Zone X, which is designated by the Federal Emergency Management Agency (FEMA) as an Area of Minimal Flood Hazard.[3] Therefore, impacts related to the impediment or redirection of flood flows, exposure of people or structures to risk of loss, injury or death involving flooding, or risking the release of pollutants due to project inundation would not occur.

19.6 NOISE

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue area:

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The project site is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. As such, noise impacts related to the exposure of people residing or working in the project area to excessive noise levels associated with such uses would not occur.

19.7 POPULATION AND HOUSING

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue areas:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure); and/or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The proposed project would involve construction of a full production winery, and only includes one on-site residential unit on the second floor of the octagon building for the owner to use primarily during harvest. In addition, all utility and transportation infrastructure improvements would be designed to serve the proposed project only, and would not provide major infrastructure or connections to the surrounding area. As such, the proposed project would not create the opportunity for unplanned population growth. Further discussion of indirect growth caused by the proposed project can be found in the Growth-Inducing Impacts section of Chapter 20, Statutorily Required Sections, of this EIR.

[3] Federal Emergency Management Agency. *Flood Insurance Rate Map 06061C0960H.* Effective November 2, 2018.

The project site does not currently contain any existing residential structures. As such, the proposed project would not displace a substantial amount of existing housing or people and would not necessitate the construction of replacement housing elsewhere.

19.8 RECREATION

Consistent with Appendix G of the CEQA Guidelines and Placer County's Environmental Checklist, the proposed project was determined to have no impact with regard to the following issue areas:

- 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; or
- 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.

As stated above, the proposed project would involve construction of a full production winery, and only includes one on-site residential unit on the second floor of the octagon building for the owner to use primarily during harvest. Given the nature of the winery, patrons would be unlikely to depart from the project site in order to use a nearby park. In fact, the nearest park is located more than a mile to the south. Thus, the likelihood that patrons would use a nearby park following a visit to the proposed project would be low. In addition, the proposed project does not include or require the construction of recreational facilities and, therefore, would not lead to any related adverse physical effects on the environment.

20. Statutorily Required Sections

20. STATUTORILY REQUIRED SECTIONS

20.1 INTRODUCTION

The Statutorily Required Sections chapter of the Draft EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines, Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

20.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether these effects are significant and adverse (see *CEQA Guidelines*, Section 15126.2[d]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth and Construction of Housing

The proposed project would include the development of a full production winery, including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and other associated facilities. Because of the commercial and industrial nature of the proposed project, buildout would not directly result in an increase in population or construction of housing.

While construction of the proposed project would result in a limited increase in construction employment opportunities, construction would be temporary, and jobs would likely be filled by the local employee base. Therefore, an increase in permanent population and a demand for housing in the vicinity of the project site as a result of the construction-related employment opportunities associated with the proposed project would not occur. Buildout of the proposed project would also provide long-term employment opportunities associated with the proposed winery facilities. However, the proposed project would employ a maximum of 17 full-time employees, which would

also likely be filled from the local employee base. Due to the relatively small number of employees, the proposed project would not result in a substantial increase in permanent population and a demand for housing in the vicinity of the project site.

The proposed project has the potential to foster economic growth due to the commercial nature and employment opportunities of the proposed project. However, it is reasonable to assume that the magnitude of economic growth would not be substantial such that new business growth would result elsewhere in the region which could necessitate additional housing to support the employment base. Thus, while the project would foster economic growth, a less-than-significant impact related to population and economic growth would occur.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 15, Public Services and Utilities, of this EIR, an existing on-site public well, constructed in accordance with the requirements of the Placer County Environmental Health Division and the State Water Resources Control Board (SWRCB), would be used to supply potable water to the project site. The well is designed to serve the proposed project's water demand only. Thus, the proposed water system is not anticipated to result in elimination of obstacles to population growth.

Sanitary sewer service would be provided by an on-site septic system that would be compliant with State and County requirements. The proposed on-site septic system would be designed such that all on-site effluent flow would be treated and contained on-site. The system is sized to accommodate the proposed project's wastewater generation only. Therefore, the proposed septic system would not serve to eliminate obstacles to population growth in the project vicinity.

Based on the above, all utility infrastructure improvements involved in the proposed project would exclusively serve the proposed project, and, therefore, the project would not be anticipated to eliminate any obstacles to population growth.

Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 15, Public Services and Utilities, of this EIR, increased demands for fire and police protection services attributable to the proposed project would not necessitate the construction of new or expanded facilities that could cause significant environmental impacts. In addition, wastewater generated by the proposed project could be accommodated by wastewater treatment facilities and infrastructure proposed as part of the project, and existing water supply infrastructure exists on-site to accommodate the domestic water demand associated with the proposed project.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as result of the project. Furthermore, mitigation measures set forth in Chapter

12, Hydrology and Water Quality, of this EIR would ensure that the proposed project would not create or contribute runoff water that would exceed the capacity of the County's stormwater drainage systems. Therefore, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate other Activities That Could Significantly Affect the Environment

This EIR provides a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4 through 19 of this EIR, which comprehensively address the potential for impacts from development on the project site.

20.3 CUMULATIVE IMPACTS

CEQA Guidelines, Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that would adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines, Section 15355, subd. [a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines, Section 15355, subd. [b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable," and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

> (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative

impact, provided that such documents are referenced and made available for public inspection at a specified location;

(2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and

(3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

A discussion of cumulative impacts is provided within each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

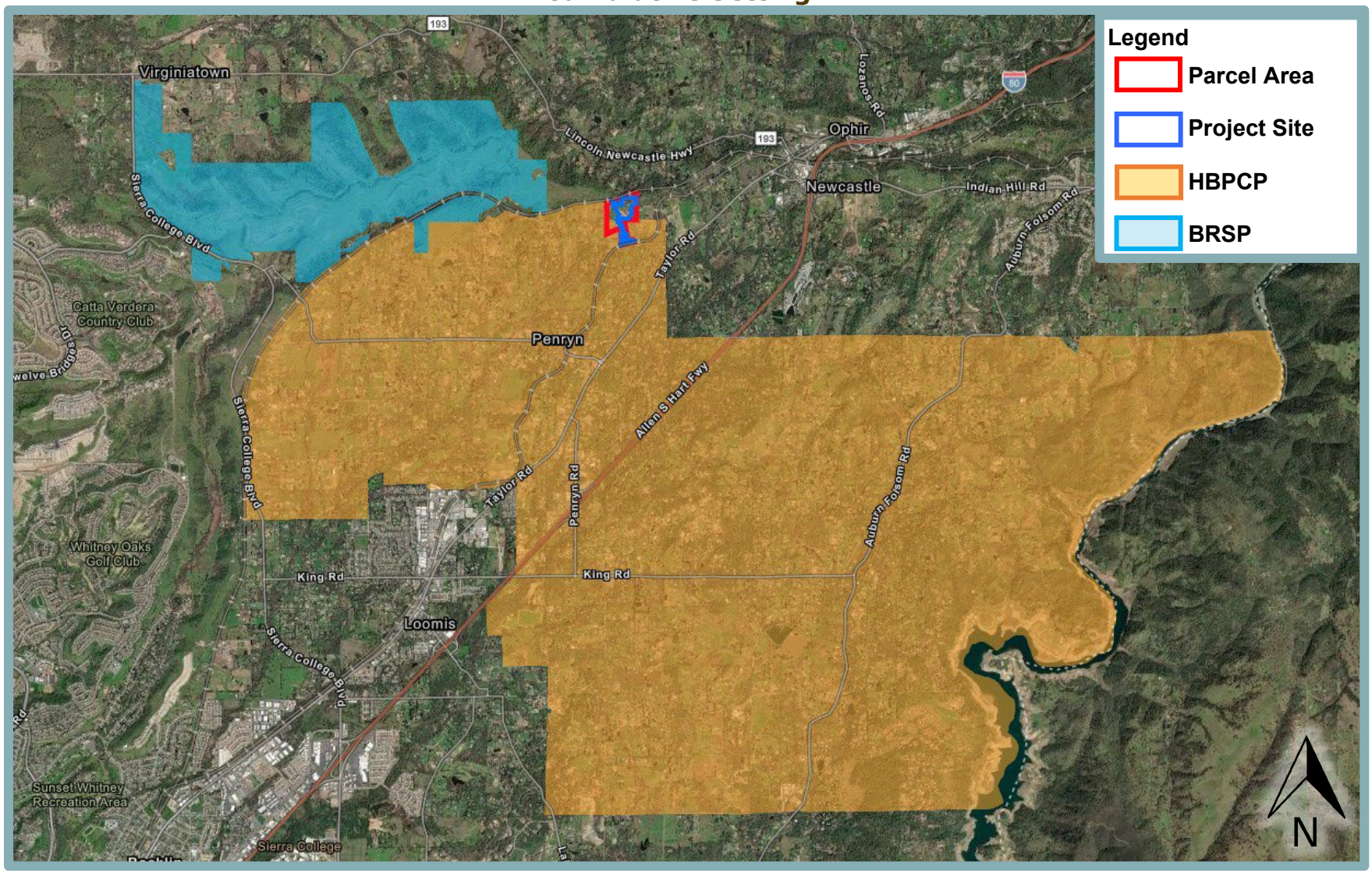
Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact" (id., subd. [b][1]).

As discussed above, two approaches exist for identifying cumulative projects and their associated impacts. The "list" approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The "projection" approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis, which is based upon a summary of projections contained in the Horseshoe Bar/Penryn Community Plan (HBPCP) and Bickford Ranch Specific Plan (BRSP). In general, the reasons for using these two County adopted plans as the cumulative setting are: 1) the project site is partially within the HBPCP wherein the majority of planned land uses surrounding the site are located; and 2) the BRSP is currently under construction (Phase 1) and located northwest of the project site (see Figure 20-1). While much of the traffic and related activity from the BRSP and the proposed project may not combine to produce cumulative effects, given the various routes of access to the two areas, some overlap would be expected to occur.

The HBPCP includes an area of approximately 25 square miles located generally west and south of the project site. The HBPCP sets forth goals, policies, assumptions, guidelines, and implementation measures to guide the development of the HBPCP area. The HBPCP establishes regulations for residential, industrial, commercial, and open space development within the HBPCP area.

Figure 20-1
Cumulative Setting



At buildout, the HBPCP would generally consist of 5,028 residential units, 166 acres of Penryn Parkway uses, 26 acres of industrial uses, 38 acres of commercial uses, 635 acres of riparian drainage, and 494 acres of open space.

The BRSP is a County-approved master planned community anticipated for implementation over three phases on 1,942.5 acres located northwest of the project site. At buildout, the BRSP would generally consist of 1,890 new residential units, more than 1,100 acres of open space and recreation, and new public facilities, including a fire station and school site for a potential future school. As such, the County-approved BRSP would result in changes to the existing land use environment through conversion of vacant land to developed uses.

Limited situations exist where the geographic setting differs for certain CEQA topics. Examples include air quality, for which the cumulative geographic setting is the Sacramento Valley Air Basin (SVAB). Global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

In addition, as discussed in Chapter 12, Hydrology and Water Quality, of this EIR, the cumulative analysis is defined by watershed boundaries. The project site is located within the Antelope Creek zone of the larger Dry Creek watershed. Overall, the total watershed area being analyzed within this EIR includes seven drainage sheds which encompass a total of 67.43 acres.

20.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(c), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Irreversible consumption of construction materials, such as lumber, associated with the proposed project;
- Irreversible consumption of goods and services, such as fire and police services, associated with project buildout; and
- Irreversible consumption of energy and natural resources, such as water, electricity, and propane, associated with project buildout.

20.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines §15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant. This section identifies significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigations imposed by the County. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the County as part of the County's certification action. The significant and unavoidable impacts of the proposed project are summarized below.

In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. (Impact 4-2)

The project site is undeveloped and consists primarily of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. Implementation of the proposed winery would change existing public viewsheds of the site from predominantly undeveloped, rural landscapes to a winery with new structures on a hillside.

General Plan Policy 1.O.3(a) requires new development structures outside of village, urban, and commercial centers to be designed and located such that they do not silhouette against the sky above ridgelines or hilltops. As discussed above, the current maximum allowable building height for the project site is 36 feet. The proposed octagon building would be constructed at a height of 75 feet from the finished grade, which would exceed the current allowable building height by 39 feet. However, the proposed project would include a Zoning Text Amendment (ZTA) to allow a structure for a winery, tasting room, or accessory use-restaurant to exceed the prescribed height limit for the applicable zone, if the additional height is authorized through a Conditional Use Permit (CUP) process that includes an analysis of visual impacts, including photo simulations. Nonetheless, as shown in Chapter 4 (Figures 4-7 and 4-8), the new 75-foot-tall octagon building would extend above the existing tree canopy on the hillside and would silhouette against the sky. Thus, the project would be inconsistent with Policy 1.O.3(a).

Therefore, the proposed project would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings, even after the incorporation of Mitigation Measure 4-2, which would require the submittal of a Final Landscape Plan in conjunction with the submittal of improvement plans for review and approval by the County. Implementation of Mitigation Measure 4-2 would help to further screen public views of the project site, but would not sufficiently reduce to impact to a less-than-significant level, as development of the proposed project would still substantially degrade the existing visual character or quality of

public views of the site and its surroundings. Therefore, even with implementation of Mitigation Measure 4-2, a significant and unavoidable impact would occur.

Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of Placer County. (Impact 4-4)

Future development within the County would result in changes to the existing land use environment through conversion of currently vacant land to developed uses that would result in changes in visual character. The southern portion of the project site is located within the approximately 16,620-acre HBPCP area, which encompasses the majority of the surrounding area to the south and west of the project site. In addition, the approximately 1,928-acre BRSP area is located northwest of the project site. Development of planned land uses within the HBPCP and BRSP areas, as well as the project site, would change the existing visual character of those specific locations from vacant or minimally developed land to more intensively developed areas, or in the case of the proposed project, a winery.

Cumulative buildout in the geographic area would result in a substantial change in visual character of the project region and, thus, a significant cumulative impact would occur. Given that the project site is predominantly undeveloped and affords public views from Callison Road and the commuter rail line of rural landscape, comprised of rolling grassland and blue oak woodlands, the existing visual character of the project site would be significantly altered. Therefore, the project's incremental contribution to the significant impact would be cumulatively considerable, and a significant and unavoidable impact would occur.

Result in VMT which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b). (Impact 16-5)

Implementation of the proposed project would result in a significant impact related to the generation of vehicle miles traveled (VMT) in excess of the Placer County VMT thresholds. In accordance with the Placer County VMT thresholds, Commercial Retail projects result in a significant VMT impact if they would result in a net increase in total VMT. Because the proposed project would increase total regional VMT by 0.026 percent, the impact would exceed the applicable threshold of significance and a significant impact could occur. Under County guidelines, if a project would result in a significant VMT impact, the project must implement mitigation measures that would reduce the project's VMT to the maximum extent feasible. Mitigation Measures 16-5(a) through 16-5(c) require that, during project operation, the project applicant shall submit to employees and guests information regarding the availability of Placer Transit service in the project vicinity, provide an employee carpool matchings service, and provide an on-site location for guest bus parking within the dedicated parking area.

While the proposed project would implement the mitigation measures listed above, which could reduce project-generated VMT, the extent to which the measures would be used and the effectiveness of the measures in reducing project-generated VMT is uncertain. Because Placer County cannot ensure the proposed project would result in zero net increase in total regional VMT, even with incorporation of mitigation, the impact would remain significant and unavoidable.

21. Alternatives Analysis

21. ALTERNATIVES ANALYSIS

21.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

21.2 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these

alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The proposed project is being pursued with the following objectives:

1. The Winery

Construct and operate an economically viable high-end winery capable of producing over 50,000 cases of top-quality wine varietals annually, using both wine grapes grown in Placer County on the project's adjacent vineyards that possess historically productive soil, and wine grapes sourced from the best varietal vineyards in other regions of California.

2. The Facility

Integrate processing facilities into the site topography and develop a cave complex to reduce the above-ground winery footprint and provide optimum cellar conditions for wine processing and storage (e.g., temperature and humidity).

3. The Technology

Optimize unique and energy efficient gravity flow processing to preserve the ideal molecular structure of the wine or minimize oxidation with the integration of the latest optical sorting technologies, data measuring, and fermenting methods to consistently produce high quality wine on-site and preserve operational flexibility.

4. Tasting and Dining, the Experience

Provide on-site wine tasting, offered daily, and carefully crafted food and wine pairings in an iconic tasting/dining room with spectacular views of winery vineyards and the surrounding areas of Placer County in order to create memorable experiences for visitors and elevate Placer County as an agri-tourism destination.

5. The Events

Host Agricultural Promotional Events that showcase the wine, vineyards, innovative winemaking technology, as well as other locally farmed products and host Special Events which, combined with the Agricultural Promotional Events, will contribute to Placer County's efforts to meet its goals of supporting the local agricultural industry and generating positive economic impacts through agricultural land uses.

6. The Environment

Develop an environmentally sustainable project through responsible sizing, energy saving initiatives, reduced water consumption, industry leading reuse technologies, and solar energy production.

Impacts Identified in the EIR

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. The significance level of impacts identified in the EIR are presented below.

Less Than Significant or No Impact

As discussed in each respective section of this EIR, the proposed project would result in no impact or a less-than-significant impact related to the following topics associated with the resource area indicated, and mitigation would not be required:

- ***Aesthetics.*** The EIR determined that a less-than-significant impact would occur related to the proposed project having a substantial adverse effect on a scenic vista. In addition, the EIR determined no impact would occur related to the proposed project substantially damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.

- ***Agriculture and Forestry Resources.*** The EIR determined that all impacts, including cumulative impacts, related to agriculture and forestry resources would be less than significant.

- ***Air Quality and Greenhouse Gas Emissions.*** The EIR determined that all impacts, including cumulative impacts, related to air quality and greenhouse gas (GHG) emissions would be less than significant.

- ***Biological Resources.*** The EIR determined that impacts related to special-status plant species, as well as impacts to wildlife movement corridors, would be less than significant.

- ***Cultural Resources.*** The EIR determined that impacts related to historical resources would be less than significant. In addition, the EIR determined that the proposed project

would result in a less than significant impact related to the cumulative loss of cultural resources.

- ***Energy.*** The EIR determined that the proposed project would result in less-than-significant impacts for all issues related to energy, including cumulative impacts.

- ***Geology and Soils.*** The EIR determined that impacts related to earthquake fault rupture, strong seismic ground shaking, and seismic-related ground failure, including liquefaction, and landslides, soils incapable of supporting the use of septic tanks or alternative waste water disposal systems, and the destruction of a unique paleontological resource or site or unique geologic feature would be less than significant. In addition, cumulative increases in the potential for geological related impacts and hazards were determined to be less than significant. In addition, the EIR determined that no impact would occur related to the proposed project resulting in exposure of people or property to geologic and geomorphological (i.e., Avalanches) hazards, such as earthquakes, landslides, mudslides, seismic-related ground failure or similar hazards, and resulting in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

- ***Hazards and Hazardous Materials.*** The EIR determined that the proposed project would result in no impact or less-than-significant impacts for all issues related to hazards and hazardous materials.

- ***Hydrology and Water Quality.*** The EIR determined that impacts related to groundwater, as well as cumulative impacts related to water quality and drainage, would be less-than-significant. In addition, the EIR determined that no impact would occur related to the proposed project placing housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would impede or redirect flood flows, expose people or structures to risk of loss, injury or death involving flooding, or risk release of pollutants due to project inundation.

- ***Land Use and Planning.*** The EIR determined that the proposed project would result in less-than-significant impacts for all issues related to land use and planning, including cumulative impacts.

- ***Noise.*** The EIR determined that the proposed project would result in no impact or less-than-significant impacts for all issues related to noise and vibration, including cumulative impacts.

- ***Population and Housing.*** The EIR determined that the proposed project would result in no impact for all issues related to population and housing.

- ***Public Services and Utilities.*** The EIR determined that all impacts related to public services and utilities, including cumulative impacts, would be less than significant.

- ***Recreation.*** The EIR determined that the proposed project would result in no impact for all issued related to recreation.

- ***Transportation.*** The EIR determined that impacts related to conflicting with a program, plan, ordinance, or policy, except level of service (LOS), addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations would be less-than-significant. In addition, a less-than-significant impact would occur with regard to emergency access and access to nearby uses.

- ***Tribal Cultural Resources.*** The EIR determined that cumulative impacts related to tribal cultural resources would be less than significant.

- ***Wildfire.*** The EIR determined that the proposed project would result in less-than-significant impacts related to substantially impairing an adopted emergency response plan or emergency evacuation plan, requiring the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, and exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. In addition, impacts associated with an increase in wildfire risk attributable to the proposed project, in combination with cumulative development, were determined to be less than significant.

As stated above, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. Because the proposed project would not result in significant impacts related to the resource areas listed above, a comparison of potential impacts associated with the aforementioned resource areas as a result of project alternatives versus the proposed project is not provided in this chapter. Rather, this chapter focuses on those resource areas and specific impacts listed below that have been identified for the proposed project as requiring mitigation to reduce significant impacts to less than significant, or have been found to remain significant and unavoidable.

Less Than Significant with Mitigation

Environmental impacts (including cumulative impacts) of the proposed project that have been identified as requiring mitigation measures to ensure that the level of significance is ultimately less than significant include the following:

- ***Aesthetics.*** The EIR determined that because the types of lighting and the specific locations have not yet been determined, implementation of the proposed project could be considered to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The EIR determined that the proposed project's incremental contribution to the significant cumulative impact related to light and glare would be cumulatively considerable. However, the EIR requires mitigation to ensure that the project-specific impact is reduced to a less-than-significant level, and the project's incremental contribution to the significant cumulative impact is reduced to less than cumulatively considerable.

- ***Biological Resources.*** The EIR determined that implementation of the proposed project could result in potential adverse effects to special-status wildlife species and have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or federally protected wetlands. In addition, given that the proposed project would impact habitats protected by the Placer County Conservation Program (PCCP), the project could

conflict with local policies and/or ordinances that protect biological resources, including tree resources, as well as conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Based on the project-level conclusions, the proposed project's incremental contribution to the cumulative loss of habitat for special-status species could be considered cumulatively considerable. However, the EIR requires mitigation to ensure that impacts related to the aforementioned biological resources would be reduced to less-than-significant levels.

- ***Cultural Resources.*** The EIR determined that implementation of the proposed project could result in the disturbance or destruction of unique archaeological resources and/or human remains, or have the potential to cause a physical change which would affect unique cultural values, restrict existing religious or sacred uses within the potential impact area. However, the EIR requires mitigation to ensure that impacts related to cultural resources would be less than significant.

- ***Geology and Soils.*** The EIR determined that implementation of the proposed project could result in potentially significant impacts related to soil erosion and/or loss of topsoil, unstable geologic units/soils (specifically related to expansive soils), disruptions, displacements, compaction, or overcrowding of the on-site soils, and substantial changes to topography or ground surface relief features. However, the EIR requires mitigation to ensure that the aforementioned impacts are reduced to less-than-significant levels.

- ***Hydrology and Water Quality.*** The EIR determined that implementation of the proposed project could result in potential construction and operational impacts related to water quality, changes in drainage patterns, and increases in stormwater runoff rates during operation of the proposed project. However, the EIR requires mitigation to ensure that impacts related to hydrology and water quality are reduced to less-than-significant levels.

- ***Tribal Cultural Resources.*** The EIR determined that the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074. However, the EIR requires mitigation to ensure that impacts related to tribal cultural resources are reduced to less-than-significant levels.

- ***Transportation.*** The EIR determined that implementation of the proposed project would result in a significant impact related to conflicting with a program, plan, ordinance, or policy, addressing the circulation system during construction activities. In addition, a significant impact would occur with regard to a substantial increase in hazards due to a geometric design feature or incompatible uses. However, the EIR requires mitigation to ensure that the aforementioned impacts are reduced to less-than-significant levels.

- ***Wildfire.*** The EIR determined that due to slope, prevailing winds, and other factors, the proposed project could exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, resulting in a significant impact. However, the EIR requires mitigation to ensure that the aforementioned impact is reduced to a less-than-significant level.

Significant and Unavoidable

The EIR has determined that the following project impacts would remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in this EIR:

- ***Aesthetics.*** The EIR determined that the proposed project would result in a significant impact related to substantially degrading the existing visual character or quality of public views of the site and its surroundings. In addition, the proposed project's contribution to the long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the project area was determined to be cumulatively considerable and significant. Implementation of mitigation measures included in the EIR would reduce the impacts, but not to a less-than-significant level. The EIR determined that impacts would remain significant and unavoidable.

- ***Transportation.*** The EIR determined that the proposed project would result in vehicle miles traveled (VMT) which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b), and a significant and unavoidable impact would occur. Implementation of mitigation measures included in the EIR would reduce the impact, but not to a less-than-significant level. The EIR determined that the impact would remain significant and unavoidable.

21.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Considered But Dismissed From Further Analysis

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

(i) failure to meet most of the basic project objectives,
(ii) infeasibility, or
(iii) inability to avoid significant environmental impacts.

Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

The off-site alternative was considered but dismissed from detailed analysis in this EIR. The reason(s) for dismissal, within the context of the three above-outlined permissible reasons, are provided below.

Off-Site Alternative

Section 15126.6(f)(2)(B) of the CEQA Guidelines states, "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reason in the EIR." For the reasons described below, a feasible location for the proposed project that would result in substantially reduced impacts does not exist.

The CEQA Guidelines Section 15126.6(b) requires that only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. The Off-Site Alternative would involve the construction of the proposed project on an alternative location. The Off-Site Alternative would locate the proposed project on other lands located within the vicinity of the proposed project site. The project applicant does not possess a comparable property. In addition, the project applicant owns the parcel surrounding the project site and is currently using the surrounding land for wine grape production, and such grapes would be used by the proposed adjacent winery. Thus, if the winery was located elsewhere in western Placer County, employee and haul truck trip lengths would be increased, as they would need to drive from the vineyards to the winery, etc.

CEQA Guidelines also state that, by definition, an alternative should avoid or substantially lessen one or more of the environmental effects of the project. Alternative locations within the project area would generally contain characteristics similar to the proposed project site. Development of the project on another similar site would result in an equal area being graded and, therefore, similar physical environmental impacts would occur related to land disturbance activities. In addition, locating the proposed winery on another site would not be expected to eliminate the significant and unavoidable impacts identified for the proposed project related to aesthetics and VMT. Specifically, impacts associated with the octagon building would still be expected to occur as the octagon building would still require a hilltop for gravity filtration of the wine. Thus, the



octagon building may potentially be more visible from public viewpoints depending on the alternative location. In addition, operations of the winery would be the same at an alternative location, and, as discussed above, if the winery was located elsewhere in western Placer County employee and haul truck trip lengths would be increased as they would need to drive from the vineyards to the winery. Therefore, development of the project at an alternative location in Placer County would be expected to result in the same, or worse VMT impacts, when compared to the proposed project. As a result, an environmentally feasible off-site location that would meet the requirements of CEQA, as well as meet the basic objectives of the project, does not exist.

Alternatives Considered in this EIR

The following alternatives are considered and evaluated in this section:

- No Project (No Build) Alternative;
- Reduced Height Alternative; and
- Reduced Operations Alternative.

Please see Table 21-2 for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

As discussed above, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. Therefore, this chapter focuses on the resource areas and specific impacts listed above that have been identified for the proposed project as requiring mitigation to reduce significant impacts to less than significant, or have been found to remain significant and unavoidable.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

> "… discuss […] existing conditions […] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." (*Id.*, subd. [e][2]) "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property's existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The County has decided to evaluate a No Project (No Build) Alternative, which assumes that the proposed project site would remain in its current condition and would not be developed. As described in this EIR, the project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The



Antelope Canal, owned by Placer County Water Agency (PCWA), traverses the entire property from east to west and is fed by the Dutch Canal. The No Project (No Build) Alternative would not meet any of the project objectives and would not meet the overall intent of the project site's land use designation.

Aesthetics

The EIR determined that the proposed project would result in a significant and unavoidable impact related to substantially degrading the existing visual character or quality of public views of the site and its surroundings. In addition, the EIR determined that without implementation of Mitigation Measure 4-3, the proposed project could increase the amount of light and glare generated on-site, which could be visible from the surrounding residential development and roadways in the project vicinity. The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new structures or buildings on the site, the Alternative would not degrade the existing visual character or quality of public views of the site and its surroundings, and the creation of new sources of light or glare would not occur. Mitigation Measures 4-2, 4-3, 4-4, and 4-5 would not be required. Thus, impacts related to Aesthetics would not occur under the No Project (No Build) Alternative.

Biological Resources

Under the No Project (No Build) Alternative, while construction activities associated with the proposed winery facilities would not occur on the project site, ground disturbance related to continued agricultural use of the site has the potential to occur. As such, the Alternative could have the potential to impact special-status wildlife species. However, agricultural uses are allowed by right within the project site, and are exempt from PCCP compliance. In addition, the Alternative would not result in any substantial adverse effects on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on federal or State protected aquatic resources. Given that the Alternative would result in the continued use of the site with agricultural activities, the Alternative would not conflict with the PCCP. Mitigation Measures 7-2, 7-3(a) through 7-3(f), 7-5, and 7-6(a) and 7-6(b) would not be required. Overall, fewer impacts related to Biological Resources would occur under the No Project (No Build) Alternative as compared to the proposed project.

Cultural Resources

The No Project (No Build) Alternative would potentially consist of continued agricultural operations on the project site, which would involve disturbance of soils through planting, disking, etc. Disturbance of soils through agricultural operations is, in some ways, similar to the construction activities that would occur as part of the proposed project. However, unlike the agricultural operations, construction of the proposed project would involve excavation work associated with installation of utility infrastructure and the wine cave network. Such excavation work would require a greater depth of disturbance than the agricultural operations. The additional depth of disturbance would increase the likelihood of encountering previously unknown cultural resources. In addition, Mitigation Measures 8-2(a), 8-2(b), 8-3, and 8-4 would not be required. Overall, impacts related to Cultural Resources would be less under the No Project (No Build) Alternative.

Geology and Soils

The No Project (No Build) Alternative would potentially consist of continued agricultural operations on the project site, which would involve disturbance of soils through planting, disking, etc. Disturbance of soils through agricultural operations is, in some ways, similar to the construction

activities that would occur as part of the proposed project. However, unlike the agricultural operations, construction of the proposed project would involve excavation work associated with installation of utility infrastructure and the wine cave network, as well as grading activities for building foundations. As such, construction of the proposed project would be expected to result in more substantial soil erosion or loss of topsoil as compared to the agricultural operations that could potentially occur under the No Project (No Build) Alternative. In addition, because development of the proposed winery facilities would not occur, the Alternative would not result in unstable geologic units/soils, disruptions, displacements, compaction, or overcrowding of the on-site soils, and substantial changes to topography or ground surface relief features. Thus, Mitigation Measures 10-2(a), 10-2(b), 10-3, and 10-6 would not be required. Overall, impacts related to Geology and Soils would be fewer under the No Project (No Build) Alternative as compared to the proposed project.

Hydrology and Water Quality

The No Project (No Build) Alternative would potentially consist of continued agricultural operations on the project site, which would involve ground disturbing activities. However, the No Project (No Build) Alternative would not involve construction activities that could lead to erosion, with the possible exception of construction of accessory agricultural support structures. Any development at the site under this Alternative would be substantially less than the proposed project. In addition, the No Project (No Build) Alternative would not involve changes in drainage patterns, placement of housing or improvements in a flood hazard area, or increases in stormwater runoff. Thus, Mitigation Measures 12-1, 12-2(a) through 12-2(d), and 12-4(a) through 12-4(c) would not be required. Overall, impacts related to Hydrology and Water Quality would be fewer under the No Project (No Build) Alternative.

Transportation

The No Project (No Build) Alternative would not generate short-term construction or long-term operational vehicle traffic on local roadways. Thus, Mitigation Measure 16-1 related to preparation of a Construction Traffic Management Plan (CTMP) would not be required. In addition, the Alternative would not result in a substantial increase in hazards due to a geometric design feature or incompatible uses, or VMT which exceeds an applicable threshold of significance. As such, Mitigation Measures 16-3, and 16-5(a) through 16-5(d) would not be required. Overall, impacts related to Transportation would not occur under the No Project (No Build) Alternative.

Tribal Cultural Resources

The No Project (No Build) Alternative would potentially consist of continued agricultural operations on the project site, which would involve disturbance of soils through planting, disking, etc. Disturbance of soils through agricultural operations is, in some ways, similar to the construction activities that would occur as part of the proposed project. However, unlike the agricultural operations, construction of the proposed project would involve excavation work associated with installation of utility infrastructure and the wine cave network. Such excavation work would require a greater depth of disturbance than the agricultural operations. The additional depth of disturbance would increase the likelihood of encountering previously unknown tribal cultural resources. In addition, Mitigation Measures 17-1(a) through 17-1(d) would not be required. Overall, impacts related to Tribal Cultural Resources would be less under the No Project (No Build) Alternative.

Wildfire

The proposed winery facilities would not be constructed on-site under the No Project (No Build) Alternative. As a result, the Alternative would not have the potential to exacerbate wildfire risks or expose nearby residents to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to construction activities. However, because development of the proposed winery facilities would not occur, the project site would contain more on-site fuel sources (i.e., vegetation). Nonetheless, overall impacts related to Wildfire would be fewer under the No Project (No Build) Alternative as compared to the proposed project.

Reduced Height Alternative

Similar to the proposed project, the Reduced Height Alternative would develop a full production winery, including wine production facilities, a tasting room, an underground wine cave network, an accessory restaurant, and other associated facilities. However, under the Reduced Height Alternative, the octagon building would be split into two shorter buildings, each built to a height of 36 feet, which is the maximum allowable height for buildings within the Farm Building 20-Acre Minimum (F-B-X 20) zoning designation (see Figure 21-1). As such, a Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330 of the Placer County Code, and a Conditional Use Permit (CUP) to allow the octagon building to reach a height of 75 feet from the finished grade, would not be required under the Reduced Height Alternative.

As discussed in Chapter 3, Project Description, of this EIR, under the proposed project the octagon building would sit atop the hill located in the northern portion of the project site in order to allow for gravity filtration down to the wine cave level. The top 15 feet of the structure and final level (level five) would be 3,500 sf and would primarily be used to facilitate gravity filtration of the wine during processing. Gravity filtration would be carried out by bringing the unfinished wine to the top level in 550-gallon vessels and allowing the wine to flow down to the level of the wine caves (approximately 160 feet), which would create the necessary pressure (70 pounds per square inch [psi]) for the wine to be filtered, when necessary, without the use of pumps, thus preserving the ideal molecular structure of the wine. Given that the Reduced Height Alternative would reduce the height of the octagon building by approximately 39 feet, the split building under the Alternative would not be tall enough to create the necessary 70 psi for the wine to be filtered. As such, as shown in Figure 21-1, a 75-foot agricultural structure would be developed on-site atop the hill under the Reduced Height Alternative, and would be used solely for the gravity filtration process. A Minor Use Permit would be required to allow the structure to be constructed at a height of 75 feet.

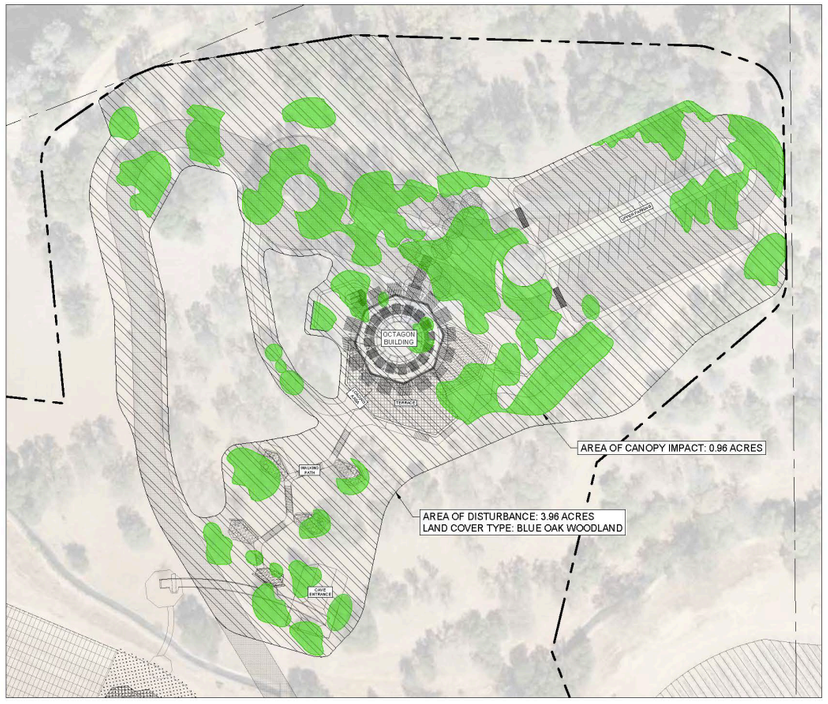
As shown in Figure 21-2, the proposed project would result in a disturbance area of 3.96 acres, and a woodland canopy impact of 0.96-acre associated with the octagon building, while the Reduced Height Alternative would result in a disturbance area of 5.42 acres, and a woodland canopy impact of 2.62 acres associated with the alternative building design. Therefore, the Alternative would result in an increased disturbance area of 1.46 acres as compared to the proposed project, as well an increase in woodland canopy impacts by 1.65 acres.

All other on- and off-site improvements required under the Reduced Height Alternative, including improvements to Callison Road, would be identical to the proposed project. In addition, while a CUP to allow the height of the octagon building to reach 75 feet would not be required, the Alternative would still require a CUP for the operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events.

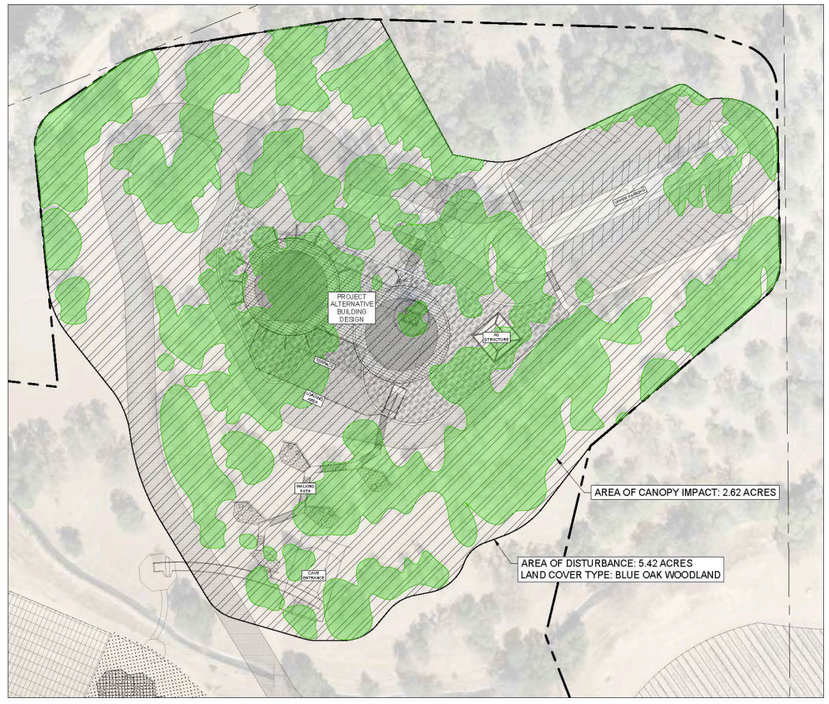
Figure 21-1
Reduced Height Alternative



Figure 21-2
Reduced Height Alternative Area of Disturbance and Canopy Impact Comparison



01 **IMPACT AREAS - PROJECT8**
3/32" = 1'-0"
NORTH



02 **IMPACT AREAS - PROJECT ALTERNATIVE**
3/32" = 1'-0"
NORTH

IMPACT AREA COMPARISON

AREA OF DISTURBANCE

PROJECT 8 : = 3.96 ACRES

PROJECT ALTERNATIVE : = 5.42 ACRES

DELTA (▲)

PROJECT 8 = 1.46 ACRES < PROJECT ALTERNATIVE

WOODLAND CANOPY IMPACT

PROJECT 8 : = 0.96 ACRES

PROJECT ALTERNATIVE : = 2.62 ACRES

DELTA (▲)

PROJECT 8 = 1.65 ACRES < PROJECT ALTERNATIVE

Area of Canopy Impact

Because the Reduced Height Alternative would generally result in the development of the same winery facilities as the proposed project, all of the project objectives would be fully met except objective #4, insofar as the views of the winery vineyards and surrounding area would not be as spectacular due to the lower height of the octagon buildings.

Aesthetics

The Reduced Height Alternative would convert the project site's existing undeveloped land to urban uses. While the Alternative would result in the development of two shorter (36-foot-tall) buildings, rather than one 75-foot-tall octagon building, a 75-foot agricultural structure would still be developed on-site for the use of gravity filtration. As shown in Figure 21-1, the two shorter buildings, as well as the 75-foot agricultural structure would still be visible from their location atop the hill located in the northern portion of the project site.

Nonetheless, the Alternative would still be expected to result in changes in the views from Callison Road/Ridgeview Lane and the commuter rail line, and more substantial changes from the Callison Road/Main Entry viewpoint, albeit to a lesser extent than the proposed project due to the reduced height of the buildings. Therefore, similar to the proposed project, the Alternative would substantially degrade the existing visual character or quality of public views of the site and its surroundings and Mitigation Measure 4-2 would still be required; however, the impact would remain significant and unavoidable.

In addition, similar to the proposed project, development under the Reduced Height Alternative would introduce new sources of light and glare to the project site where none currently exist. Such sources would include, but would not be limited to, streetlights within internal street systems, vehicle headlights, exterior lighting fixtures, and interior light spilling through windows. As discussed above, the Alternative would result in the development of two shorter (36-foot) buildings, rather than one 75-foot octagon building, and a 75-foot agricultural structure for the use of gravity filtration. All other on- and off-site improvements required under the Reduced Height Alternative, including improvements to Callison Road, would be identical to the proposed project. Therefore, while the reduction in height would reduce the amount of light that could be seen from the building vertically, the addition of the second building would slightly increase the amount of lighting on-site. The agricultural structure would not include lighting. Similar to the project, all on-site lighting would be required to comply with Section 17.54.070(i) of the Placer County Code, as well as the applicable sections of the Placer County Design Guidelines related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass onto residential property lines. Nonetheless, similar to the proposed project, because the types of lighting and the specific locations are not known for the Reduced Height Alternative, Mitigation Measure 4-3 would still be required.

Overall, impacts related to Aesthetics would be slightly reduced under the Reduced Height Alternative as compared to the proposed project. However, the project-specific and cumulative significant and unavoidable impacts related to substantially degrading the existing visual character or quality of public views of the site and its surroundings would still occur under the Alternative, as the Alternative would still result in conversion of the project site from primarily undeveloped land to a full production winery.

Biological Resources

Similar to the proposed project, the Reduced Height Alternative would include ground-disturbing activities on the project site and, thus, would have the potential to impact special-status wildlife

species. As shown in Figure 21-2, due to the development of two shorter buildings and a 75-foot agricultural structure for the use of gravity filtration, rather than one 75-foot octagon building, the Alternative would result in an increased disturbance area of 1.46 acres as compared to the proposed project, as well as an increased impact area to the on-site woodland canopy of an additional 1.65 acres. Thus, the Alternative would include removal of a greater acreage of oak woodlands relative to the proposed project, and absent compliance with applicable PCCP mitigation measures, would still have the potential to conflict with the PCCP. In addition, given that all other on- and off-site improvements required under the Reduced Height Alternative, including improvements to Callison Road, would be identical to the proposed project, the Alternative would have the same potential to impact riparian habitat or other sensitive natural community, or State or federally protected wetlands within the project site as the proposed project. As a result, Mitigation Measures 7-2, 7-3(a) through 7-3(f), 7-5, and 7-6(a) through 7-6(b) would still be required. Overall, due to the increased disturbance area and woodland canopy area, impacts to Biological Resources would be greater under the Alternative compared to the proposed project.

Cultural Resources

Under the Reduced Height Alternative, the octagon building would be split into two shorter buildings, and a 75-foot agricultural structure would be constructed on-site for gravity wine filtration. All other on- and off-site improvements required under the Reduced Height Alternative, including improvements to Callison Road, would be identical to the proposed project. The Reduced Height Alternative would result in a slightly increased overall disturbance area within the project site relative to the proposed project. Consequently, Mitigation Measures 8-2(a), 8-2(b), 8-3, and 8-4 would still be required, and the potential for the Reduced Height Alternative to result in the disturbance or destruction of unique archaeological resources and/or human remains, or a physical change which would affect unique cultural values, restrict existing religious or sacred uses within the potential impact area could be slightly increased. Overall, potential impacts related to Cultural Resources would be greater under the Reduced Height Alternative compared to the proposed project.

Geology and Soils

As noted above, the Reduced Height Alternative would include a slightly greater overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to result in substantial soil erosion or loss of topsoil would be increased. Intermittent or isolated pockets of expansive clay soils are known to occur in the region, and the potential exists for expansive soils to occur on-site. Due to the Alternative's increased disturbance area, the potential for expansive clay soils to be encountered during construction would be slightly increased. Therefore, the Alternative would have an increased potential to result in unstable geologic units/soils, disruptions, displacements, compaction, or overcrowding of the on-site soils, and substantial changes to topography or ground surface relief features. Thus, Mitigation Measures 10-2(a), 10-2(b), and 10-6 would still be required. In addition, Mitigation Measure 10-3 requiring preparation of a final geotechnical engineering report to ensure adequate structural support of the proposed improvements would still be necessary. Overall, impacts related to Geology and Soils could be greater under the Reduced Height Alternative compared to the proposed project.

Hydrology and Water Quality

Given that the Reduced Height Alternative would include a slightly larger overall area of disturbance compared to the proposed project, the potential for the Alternative to result in

construction or operational impacts related to water quality could be increased. In addition, because a larger portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be increased compared to the proposed project. As such, Mitigation Measures 12-1, 12-2(a) through 12-2(d), and 12-4(a) through 12-4(c) would still be required. Overall, impacts related to Hydrology and Water Quality under the Reduced Height Alternative could be greater compared to the proposed project.

Transportation

Similar to the proposed project, the Reduced Height Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 16-1 related to preparation of a CTMP would still be required. Because the Alternative would involve construction of two shorter octagon buildings and a 75-foot agricultural structure, the Alternative would result in an increased disturbance area of 1.46 acres, as compared to the proposed project, and the overall intensity of construction activities, including associated traffic, and related impacts could be greater. In addition, given that operational characteristics would be identical to the proposed project, the Alternative would still have the potential to substantially increase hazards to vehicle safety due to a geometric design feature, and Mitigation Measure 16-3 would still be required.

Under the Reduced Height Alternative, operations of the proposed winery would be similar to the proposed project. Therefore, the Alternative would result in the same amount of VMT as the proposed project. As such, Mitigation Measures 16-5(a) through 16-5(c) would still be required, as the Alternative would still result in a net increase of VMT, which would exceed the County's VMT threshold. As a result, the Reduced Height Alternative would not eliminate the significant and unavoidable impact related to VMT.

Overall, development of the Reduced Height Alternative would result in greater impacts related to Transportation compared to the proposed project.

Tribal Cultural Resources

As noted above, the Reduced Height Alternative would result in a slightly increased overall disturbance area within the project site relative to the proposed project. Therefore, the potential for the Reduced Height Alternative to result in disturbance or destruction of tribal cultural resources would be slightly increased. Consequently, Mitigation Measure 17-1 would still be required. Overall, potential impacts related to Tribal Cultural Resources would be greater under the Reduced Height Alternative compared to the proposed project.

Wildfire

The northern portion of the project site rises to a hilltop, the plateau and slopes of which contain oak woodlands. In addition, areas surrounding the site also currently contain grassland and trees. Similar to the proposed project, implementation of the Reduced Height Alternative would include site clearing activities, which would remove on-site vegetation, including a portion of the aforementioned oak woodlands associated with the hilltop. However, as discussed above, the Alternative would result in an increased disturbance area of 1.46 acres as compared to the proposed project, as well as increased impacts to 1.65 acres of the on-site woodland canopy. The removal of additional fuel sources and slight increase in impervious surfaces on-site as compared to the proposed project would further decrease the potential for wildfire.

Nonetheless, during construction, equipment without appropriate spark arrestors could result in direct flame impingement on combustible materials, such as existing on-site vegetation or building construction supplies. As such, without proper measures to require that construction activities be equipped with CAL FIRE-approved spark arrestors, project construction could result in the ignition of on-site fuel sources. As a result, similar to the proposed project, implementation of the Alternative could result in a significant impact related to exposing occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, Mitigation Measure 18-2 would still be required.

Overall, the impacts identified for the proposed project related to Wildfire would be similar under the Reduced Height Alternative.

Reduced Operations Alternative

Under the Reduced Operations Alternative, the project site would be developed with a full production winery identical to the proposed project, including wine production facilities, a tasting room, an underground wine cave network, an accessory restaurant, and other associated facilities, on approximately 17.96 acres of the 44.14-acre parcel area. However, while the proposed project would operate seven days a week, under the Reduced Operations Alternative the winery would operate four days a week (Thursday through Sunday). In addition, while the proposed project would include up to 220 events per year, including 208 Agricultural Promotional Events, and a maximum of 12 Special Events, the Reduced Operations Alternative would assume a maximum of 115 events per year, including 103 Agricultural Promotional Events and 12 Special Events. Finally, the Reduced Operations Alternative would comply with the maximum attendee requirement of 50 people at a time for Agricultural Promotional Events. As such, a CUP to increase the number from 50 to 75 maximum attendees at one time for Agricultural Promotional Events would not be required under the Reduced Operations Alternative.

Given that all on- and off-site improvements required under the Reduced Operations Alternative would be identical to the proposed project, including the 75-foot-tall octagon building, the Alternative would still require a Zoning Text Amendment adding height limit exceptions to the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330 of the Placer County Code, as well as a CUP for the operation of an Accessory Use – Restaurant, and to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Because the Reduced Operations Alternative would generally result in the development of the same winery facilities as the proposed project, project objectives #1 through #3, #5, and #6 would be fully met. However, while the Alternative would still provide on-site wine tasting, due to the reduced operations of the Alternative, on-site wine tastings would not occur daily, and, thus, Project Objective #4 would only be partially met.

Aesthetics

Similar to the proposed project, the Reduced Operations Alternative would convert the project site's existing undeveloped land to urban uses. All on- and off-site improvements required under the Reduced Operations Alternative would be identical to the proposed project, including the 75-foot-tall octagon building. Because the Alternative would result in the same development as the proposed project, all impacts identified for the proposed project related to aesthetics would still occur and would be the same under Alternative. Therefore, similar to the proposed project, the Alternative would substantially degrade the existing visual character or quality of public views of

the site and its surroundings and Mitigation Measure 4-2 would still be required, and the impact would remain significant and unavoidable.

In addition, development under the Reduced Height Alternative would introduce the same level of new sources of light and glare to the project site where none currently exist, including streetlights, vehicle headlights, exterior lighting fixtures, and interior light spilling through windows. All on-site lighting would be required to comply with Section 17.54.070(i) of the Placer County Code and the applicable sections of the Placer County Design Guidelines related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass onto residential property lines. However, similar to the proposed project, because the types of lighting and the specific locations are not known for the Reduced Operations Alternative, Mitigation Measure 4-3 would still be required.

Overall, impacts related to Aesthetics would be similar under the Reduced Operations Alternative as compared to the proposed project. As a result, the project-specific and cumulative significant and unavoidable impacts related to substantially degrading the existing visual character or quality of public views of the site and its surroundings would still occur under the Alternative, as the Alternative would convert the project site from primarily undeveloped land to a full production winery.

Biological Resources

The Reduced Operations Alternative would involve the same overall area of disturbance as compared to the proposed project. Consequently, the Reduced Operations Alternative would have the same potential to impact special-status wildlife species, include removal of a similar number of trees as the proposed project, and have the same potential to directly impact riparian habitat, sensitive natural communities, and/or have a substantial adverse effect on federal or State protected aquatic resources located on-site. Given that the Alternative would result in impacts to biological resources, the Alternative could conflict with the provisions of the PCCP. Because the Reduced Operations Alternative would result in the same impacts as the proposed project, all of the same mitigation measures identified to reduce potential project impacts to biological resources would still apply to the Alternative. Overall impacts to Biological Resources would be similar under the Alternative compared to the proposed project.

Cultural Resources

All on- and off-site improvements required under the Reduced Operations Alternative, including improvements to Callison Road, would be identical to the proposed project. Because the Reduced Operations Alternative would result in the same area of disturbance as the proposed project, the same potential for the disturbance or destruction of unique archaeological resources and/or human remains, or a physical change which would affect unique cultural values, restrict existing religious or sacred uses, would occur under the Alternative. Thus, the same mitigation measures identified to reduce project impacts to cultural resources would still apply to the Alternative. Overall, potential impacts related to Cultural Resources would be similar under the Reduced Operations Alternative compared to the proposed project.

Geology and Soils

As noted above, the Reduced Operations Alternative would involve the same overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to result in substantial soil erosion or loss of topsoil would be the same under the Alternative as compared to the proposed project. Similarly, the Alternative would have

the same potential to encounter and/or result in unstable geologic units/soils, disruptions, displacements, compaction, or overcrowding of the on-site soils, and substantial changes to topography or ground surface relief features as compared to the proposed project. Thus, Mitigation Measures 10-2(a), 10-2(b), 10(c), 10-3 and 10-6 would still be required. In addition, Mitigation Measure 10-3 requiring preparation of a final geotechnical engineering report to ensure adequate structural support of the proposed improvements would still be necessary. Overall, impacts related to Geology and Soils would be similar under the Reduced Operations Alternative as compared to the proposed project.

Hydrology and Water Quality

Given that the Reduced Operations Alternative would involve the same overall area of disturbance compared to the proposed project, the potential for the Alternative to result in construction or operational impacts related to water quality would be the same. In addition, because the same portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be identical to the proposed project. As such, Mitigation Measures 12-1, 12-2(a) through 12-2(e), and 12-4(a) through 12-4(d) would still be required. Overall, impacts related to Hydrology and Water Quality under the Reduced Operations Alternative would be similar as compared to the proposed project.

Transportation

Similar to the proposed project, the Reduced Operations Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 16-1 related to preparation of a CTMP would still be required. In addition, while operations of the proposed project would be reduced under the Alternative, and traffic generated by the Alternative could be less as compared to the proposed project, under Cumulative Plus Project conditions, the Alternative would still have the potential to substantially increase hazards related to vehicle safety due to a geometric design feature, and Mitigation Measure 16-3 would still be required.

As discussed above, under the Reduced Operations Alternative, the winery would operate four days a week (Thursday through Sunday). In addition, the Alternative would involve a maximum of 115 events per year, including 103 Agricultural Promotional Events and 12 Special Events, with a maximum attendee requirement of 50 people at a time for Agricultural Promotional Events. As such, annual average daily traffic generated by the Alternative would be reduced, as compared to the proposed project. Table 21-1 provides a summary of the annual average daily traffic produced under the Reduced Operations Alternative in comparison to the proposed project.

Assuming the Alternative and the proposed project would generate trips of the same average length (13.8 miles) the VMT that would be generated by the Alternative was calculated using the annual average trips per day shown in Table 21-1. As a result, the Alternative would generate 1,452 average daily VMT,[1] which would be a reduction of 43 percent, as compared to the average daily VMT generated under the proposed project (2,561 average daily VMT). However, the Alternative would still increase total regional VMT by 0.014 percent. Although the Alternative would substantially reduce VMT compared to the proposed project, because the Reduced Operations Alternative would still result in an overall net increase in total regional VMT, the Alternative would exceed the County's VMT threshold. As a result, Mitigation Measures 16-5(a) through 16-5(d) would still be required. Nonetheless, because the Alternative would result in a

[1] 105.23 trips per day x 13.8 miles = 1,452.17 daily VMT.

reduction of VMT as compared to the proposed project, VMT impacts would be fewer under the Alternative. Similar to the proposed project, even with implementation of Mitigation Measures 16-5(a) through 16-5(d), the Reduced Operations Alternative would not eliminate the significant and unavoidable impact related to VMT.

Table 21-1
Annual Average Daily Traffic Comparison

Operation / Activity	Harvest?	Day	Annual days	Trips per day	Total Annual Trips
Reduced Operations Alternative					
Regular Operations	No	Weekday	80[1]	68	5,440
	No	Weekend	80[2]	66	5,280
	Yes	Weekday	24[3]	82	1,968
	Yes	Weekend	24[4]	82	1,968
Restaurant – Lunch / Dinner	Both	All	208[5]	83[6]	17,264
Average Annual Events			110[7]	59	6,490
		Total	**365**	**105.23**	**38,410**
Proposed Project					
Regular Operations	No	Weekday	200[8]	68	13,600
	No	Weekend	80[9]	66	5,280
	Yes	Weekday	60[10]	82	4,920
	Yes	Weekend	24[11]	82	1,968
Restaurant – Lunch/Dinner	Both	All	320[12]	83[13]	26,560
Average Annual Events			110[14]	140	15,400
		Total	**365**	**185.6**	**67,728**

1 40 non-harvest weeks times 2 weekdays per week (open Thu – Sun).
2 40 non-harvest weeks times 2 weekend days per week (open Thu - Sun).
3 12 harvest weeks times 2 weekdays per week (open Thu - Sun).
4 12 harvest weeks times 2 weekend days per week (open Thu - Sun).
5 Restaurant open 4 days per week or 208 days per year (open Thu - Sun).
6 Weighted average of 5 weekdays and 2 weekend days at the Saturday rate.
7 Assuming one event per day with limited exceptions = 110 annual event days (i.e., half of the proposed project total).
8 40 non-harvest weeks times five weekdays per week.
9 40 non-harvest weeks times two weekend days per week.
10 12 harvest weeks times five weekdays per week.
11 12 harvest weeks times two weekend days per week.
12 Assumes the restaurant is open on 265 "non-event" days and half of the 110 event days, or 320 days annually.
13 Weighted average of five weekdays and two weekend days at the Saturday rate.
14 220 events assuming two per day is 110 annual event days.

Source: KD Anderson & Associates, Inc, 2022.

Overall, development of the Reduced Operations Alternative would result in fewer impacts related to Transportation compared to the proposed project.

Tribal Cultural Resources

As noted above, the Reduced Operations Alternative would result in the same overall disturbance area within the project site relative to the proposed project. Therefore, the potential for the Reduced Operations Alternative to result in disturbance or destruction of tribal cultural resources would be the same. Consequently, Mitigation Measure 17-1 would still be required. Overall, potential impacts related to Tribal Cultural Resources would be similar under the Reduced Operations Alternative compared to the proposed project.

Wildfire

The northern portion of the project site rises to a hilltop, the plateau and slopes of which contain oak woodlands. In addition, areas surrounding the site also currently contain grassland and trees. As noted above, the Reduced Operations Alternative would include the same overall area of disturbance compared to the proposed project, including site clearing activities, which would remove on-site vegetation. Because the Alternative would involve removal of the same portion of the aforementioned oak woodlands associated with the hilltop, the Alternative would have the same potential to decrease on-site fuel for wildfire.

Nonetheless, similar to the proposed project, during construction, equipment without appropriate spark arrestors could result in direct flame impingement on combustible materials, such as existing on-site vegetation or building construction supplies. As such, without proper measures to require that construction activities be equipped with CAL FIRE-approved spark arrestors, project construction could result in the ignition of on-site fuel sources. As a result, implementation of the Alternative could result in a significant impact related to exposing occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, similar to the proposed project. Therefore, Mitigation Measure 18-2 would still be required.

Overall, the impacts identified for the proposed project related to Wildfire would be similar under the Reduced Operations Alternative.

21.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the County. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, many of the impacts resulting from the proposed project would not occur, or would be fewer, under the Alternative, as shown in Table 21-2 below.

The No Project (No Build) Alternative would not meet any of the project objectives. The Reduced Height Alternative and the Reduced Operations Alternative would generally result in the development of the same winery facilities as the proposed project. All of the project objectives would be fully met under the Reduced Height Alternative. Under the Reduced Operations Alternative, on-site wine tastings would not occur daily and, thus, Project Objective #4 would only be partially met.

As discussed throughout this chapter and shown in Table 21-2, the Reduced Height Alternative would result in fewer impacts to one issue area, similar impacts to one issue area, and greater impacts to the remaining six issue areas for which project impacts were identified. The Reduced Operations Alternative would result in fewer impacts than the proposed project related to one of the eight issue areas, and would result in similar impacts as the proposed project for the remaining seven issue areas for which project impacts were identified. However, under both the Reduced Height Alternative and the Reduced Operations Alternative, the significant and unavoidable

impacts related to aesthetics and transportation, which were identified for the proposed project, would still occur.

Based on the above, because the Reduced Operations Alternative is reasonably anticipated to result in fewer impacts than the proposed project related to one of the eight issue areas, and would result in similar impacts as the proposed project for the remaining seven issue areas for which project impacts were identified, as compared to the Reduced Height Alternative, which would result in greater impacts to six issue areas, the Reduced Operations Alternative would be considered the Environmentally Superior Alternative. However, as discussed above, the significant and unavoidable impacts related to aesthetics and transportation that were identified for the proposed project would still occur under the Reduced Operations Alternative, though VMT would substantially decrease. As such, the number of significant and unavoidable impacts overall would be the same under the Reduced Operations Alternative and the proposed project.

Table 21-2
Comparison of Environmental Impacts for Project Alternatives

Resource Area	Proposed Project	No Project (No Build) Alternative	Reduced Height Alternative	Reduced Operations Alternative
Aesthetics	Significant and Unavoidable	None	Fewer*	Similar*
Biological Resources	Less-Than-Significant with Mitigation	Fewer	Greater	Similar
Cultural Resources	Less-Than-Significant with Mitigation	Fewer	Greater	Similar
Geology and Soils	Less-Than-Significant with Mitigation	Fewer	Greater	Similar
Hydrology and Water Quality	Less-Than-Significant with Mitigation	Fewer	Greater	Similar
Transportation	Significant and Unavoidable	None	Greater*	Fewer*
Tribal Cultural Resources	Less-Than-Significant with Mitigation	Fewer	Greater	Similar
Wildfire	Less-Than-Significant with Mitigation	Fewer	Similar	Similar
	Total Fewer	**8**	**1**	**1**
	Total Greater	**0**	**6**	**0**
	Total Similar	**0**	**1**	**7**

Note: No Impact = "None;" Less than Proposed Project = "Fewer;" Similar to Proposed Project = "Similar;" and Greater than Proposed Project = "Greater."

* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.

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22. EIR AUTHORS AND PERSONS CONSULTED

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Other persons and sources consulted in preparation of this EIR are listed in Chapter 23, References, of this EIR.

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Appendix A

COMMUNITY DEVELOPMENT/RESOURCE AGENCY
Environmental Coordination Services
County of Placer

DATE: January 13, 2022

TO: California State Clearinghouse
Responsible and Trustee Agencies
Interested Parties and Organizations

SUBJECT: **Notice of Preparation of an Environmental Impact Report for the Proposed Project 8 Winery**

REVIEW PERIOD: **January 13, 2022 to February 11, 2022**

Placer County is the lead agency for the preparation of an Environmental Impact Report (EIR) for the Project 8 Winery Project (proposed project) in accordance with the California Environmental Quality Act (CEQA), Section 15082. The purpose of the Notice of Preparation (NOP) is to provide responsible agencies and interested persons with sufficient information to enable them to make meaningful comments regarding the scope and content of the EIR. Your timely comments will ensure an appropriate level of environmental review for the project.

Project Location: The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The proposed project would be located on portions of several parcels consisting of Assessor's Parcel Numbers [APNs] 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The proposed project site, or improvement area, consists of approximately 18 acres of the 44.14-acre parcel area. The project site is surrounded by oak woodlands and scattered rural residences, with Union Pacific Railroad (UPRR) tracks to the north and south. Access to the site is provided by Callison Road, which forms the southern boundary of the project site. The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries but located within the same 44.14-acre parcel area. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. The Placer County General Plan designates the site as Rural Residential (1-10 ac min and 2.3-4.6 ac min); the site is zoned Farm Building 20-Acre Minimum (F-B-X 20) and Residential Agricultural Building 100,000-square foot Minimum (RA-B-100).

Project Description: The proposed project would develop a full production winery, generally including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and associated facilities on approximately 17.96 acres of the 44.14-acre parcel area. When fully operational, the winery would process grapes grown on-site and purchased from specialized vineyards and would produce approximately 50,000 cases of wine annually. Above-ground structures would primarily consist of a 75-foot tall, 29,250-square-foot (sf) octagon building on the northern hillside of the project site, and a 23,500-sf processing/warehouse building to the south of the octagon building. The octagon building would be made up of five levels. The top level would house the gravity filtration processing operation which is critical to achieving the highest level of quality possible. The other four levels of the octagon building would include a rotating tasting room and accessory restaurant, a commercial kitchen, restrooms, storage, a residence, and an administration area on the ground floor with a main entry and porte cochère. Beneath the octagon building would be a level for grape processing and storage. The processing building would be linked to the octagon building by a continuous meandering walkway, which would serve as a surface connection between the two buildings. In addition, a 72-stall minimum parking lot would be developed east of the octagon building, and a 19-stall minimum parking lot would be developed to the west of the processing building. Other on-site development would include a 180-sf guard shack and a 900-sf outdoor utility pad. Primary site access would be from Callison Road to the south. The proposed project would include a new driveway encroachment into the site from Callison Road. The new gated, private driveway would begin at Callison Road and wind up the hillside, connecting to the processing building and octagon building, before ending at the parking lot east of the octagon building. The proposed project would require the approval of a Conditional Use Permit (CUP) for the construction and operation of a Large Winery on 40+ acres, the operation of an accessory restaurant, and to allow an increase from 50 to 75 maximum attendees (at one time) for Agricultural Promotional Events; as well as a Variance to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Contact Information: For more information regarding the proposed project, please refer to the following detailed

project description or contact Jennifer Byous, Supervising Planner, at (530) 745-3008 or JByous@placer.ca.gov. A copy of the NOP is available for review at the Rocklin and Roseville Public Libraries, the Placer County Community Development Resource Agency (Auburn), and on the Placer County website:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

NOP Comment Period: Written comments should be submitted at the earliest possible date, but no later than 5:00 PM on February 11, 2022 to Shirlee Herrington, Environmental Coordination Services, Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603, (530) 745-3132, fax (530) 745-3080, or cdraecs@placer.ca.gov.

NOP Scoping Meeting: In addition to the opportunity to submit written comments, a NOP scoping meeting will be held in-person and virtually via Zoom to inform interested parties about the proposed project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. Further information on the date and time of the scoping meeting is provided below.

EIR Scoping Meeting on the Project 8 Winery Project
Tuesday, February 8, 2021 | 1:00PM
In-Person:
Planning Commission Hearing Room
3091 County Center Drive, Auburn, CA
or
Virtual:
Zoom: https://placer-ca-gov.zoom.us/j/94633061323
Phone: 1-888-788-0099 | Webinar ID: 946 3306 1323

1.0 PROJECT DESCRIPTION

1.1 Location and Setting

The project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County (see Figure 1). The proposed project would be located on portions of several parcels consisting of APNs 031-220-061, 032-124-080, and 032-124-044, and totaling 44.14 acres. The southerly portion of the project site, through which the proposed access road would meander, is located within the Horseshoe Bar/Penryn Community Plan area. The remaining portion of the project site, on which the winery facilities would be located, is outside of the Community Plan area. The Placer County General Plan designates the northerly APN (031-220-061) as Rural Residential (1-10 ac min), while the two parcels within the Community Plan area are designated by the Horseshoe Bar/Penryn Community Plan as Rural Residential (2.3-4.6 ac min), consistent with the Placer County General Plan. The northerly parcel is zoned F-B-X 20-Acre Minimum; and the remaining parcels are zoned RA-B-100. Roadways in the immediate project vicinity include Callison Road, which forms the southern boundary of the project site, Ridgeview Lane to the west, and Taylor Road to the east, approximately 0.3-mile from project site. Interstate 80 (I-80) is located approximately 1.5-miles to the east. Two UPRR tracks pass through the project area, with one track bordering the northern site boundary and the other track bordering the southern site boundary. These spurs are used to move Union Pacific freights trains and Amtrak passenger trains.

The project site is bisected by Antelope Canal and consists of agricultural-related uses, including dirt roadways and graded surfaces, as well as oak woodland and grassland habitats. The dirt roadways provide access to recently planted wine grapes that are outside of the project boundaries, but located within the same 44.14-acre parcel area. The Antelope Canal, owned by Placer County Water Agency (PCWA), traverses the entire property from east to west and is fed by the Dutch Canal. The northern portion of the site rises to a hilltop, the plateau and slopes of which contain oak woodlands. Site elevation ranges from approximately 700 feet to 950 feet. Historically, the project site has been used for agricultural purposes (e.g., cattle grazing), though available evidence suggests that the agricultural activities did not cover the site entirely and appear to have tapered off between the early 1950s and mid-1960s. A single-family residence, which is still currently in use, was constructed on the lower parcel in 1973.

Figure 1
Regional Location



1.2 Surrounding Land Uses

The project site is located within a rural residential area of Placer County. The current zoning of adjacent properties is a mixture of RA-B-100, F-B-X 4.6-Acre Minimum, and F-B-X 20-Acre Minimum. Other than undeveloped land to the north, the project site is surrounded by scattered single-family residences (see Figure 2).

A more detailed breakdown of the land uses adjacent to the project site is as follows:

- **North:** Land uses to the north of the project site include UPRR railroad tracks, beyond which is undeveloped land and single-family residential homes (103, 113 Spring Lane, 7850, 7880, 7890, and 7895 Armes Lane, 420 Skyview Drive). The current zoning designation of the land to the north of the project site is F-B-X 4.6-Acre Minimum.
- **South:** Land uses to the south of the project site include rural residences (7541 Ridgeview Lane and 7585, 7685 Callison Road), Callison Road, and UPRR railroad tracks, beyond which are rural residences (1203, 1366 Sisley Road, 7880, 7945 Callison Road). The current zoning designation of the land to the south of the project site is RA-B-100, 2.3-Acre Minimum.
- **East:** Land uses to the east of the project site include rural residences (7665 Callison Road), beyond which are UPRR railroad tracks. The current zoning designation of the land to the east of the project site is F-B-X, 20-Acre Minimum.
- **West:** Land uses to the west of the project site include rural residences (7429 Allen Lane, 7450, 7455 Ridgeview Lane). The current zoning designation of the land to the east of the project site is RA-B-100, 2.3-Acre Minimum.

1.3 Project Components

The proposed project would develop a full production winery, including wine production facilities, a tasting room, and underground wine cave, an accessory restaurant, and other associated facilities, on approximately 17.96 acres of the 44.14-acre parcel area (see Figure 3 through Figure 5). The proposed project components, along with all required entitlements and approvals, are described in the following sections.

It is important to note that “crop production” associated with the existing vineyards within the 44.14-acre parcel area is an existing use allowed by right under the property’s current zoning designations of F-B-X 20-Acre Minimum and RA-B-100 (see County Code Sections 17.10.010 (B) and 17.44.010 (B)). Crop production is defined in Section 17.04.030 as crop preparation services and harvesting activities including, but not limited to, mechanical soil preparation, irrigation system construction, spraying, crop processing, and sales of the agricultural crop only. As a result, the EIR for the proposed project is not required to evaluate the effects of the existing vineyard’s crop production and harvesting operations.

<u>Proposed Development</u>
The following provides a description of the proposed on-site development.

Octagon Building
The octagon building would total 29,250 sf and would consist of a sub-level as well as four above-ground levels, reaching a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view). The building would sit atop the hill located in the northern portion of the project site in order to allow for gravity filtration down to the wine cave level, as well as to provide views overlooking the existing vineyards below (see Figure 6). The exterior of the building would include a living façade comprised of an exoskeletal structure covered with plant life to blend in with the surrounding environment. A minimum of 72 surface parking stalls would be included atop the hill for use by patrons of the octagon building, including ADA-compliant parking stalls. A portion of this parking area would be covered by solar canopies.

Figure 2
Project Location

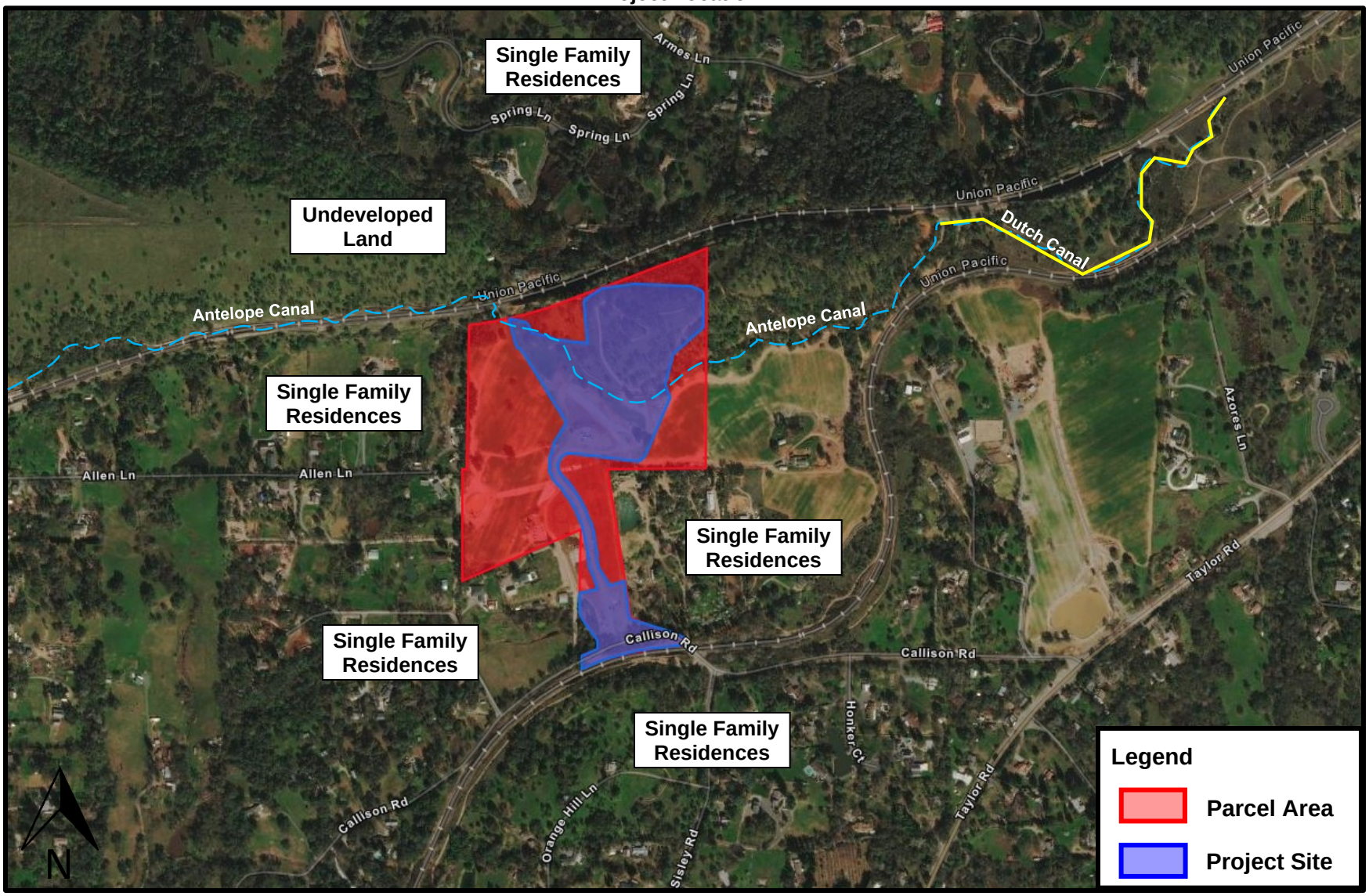


Figure 3
Site Plan

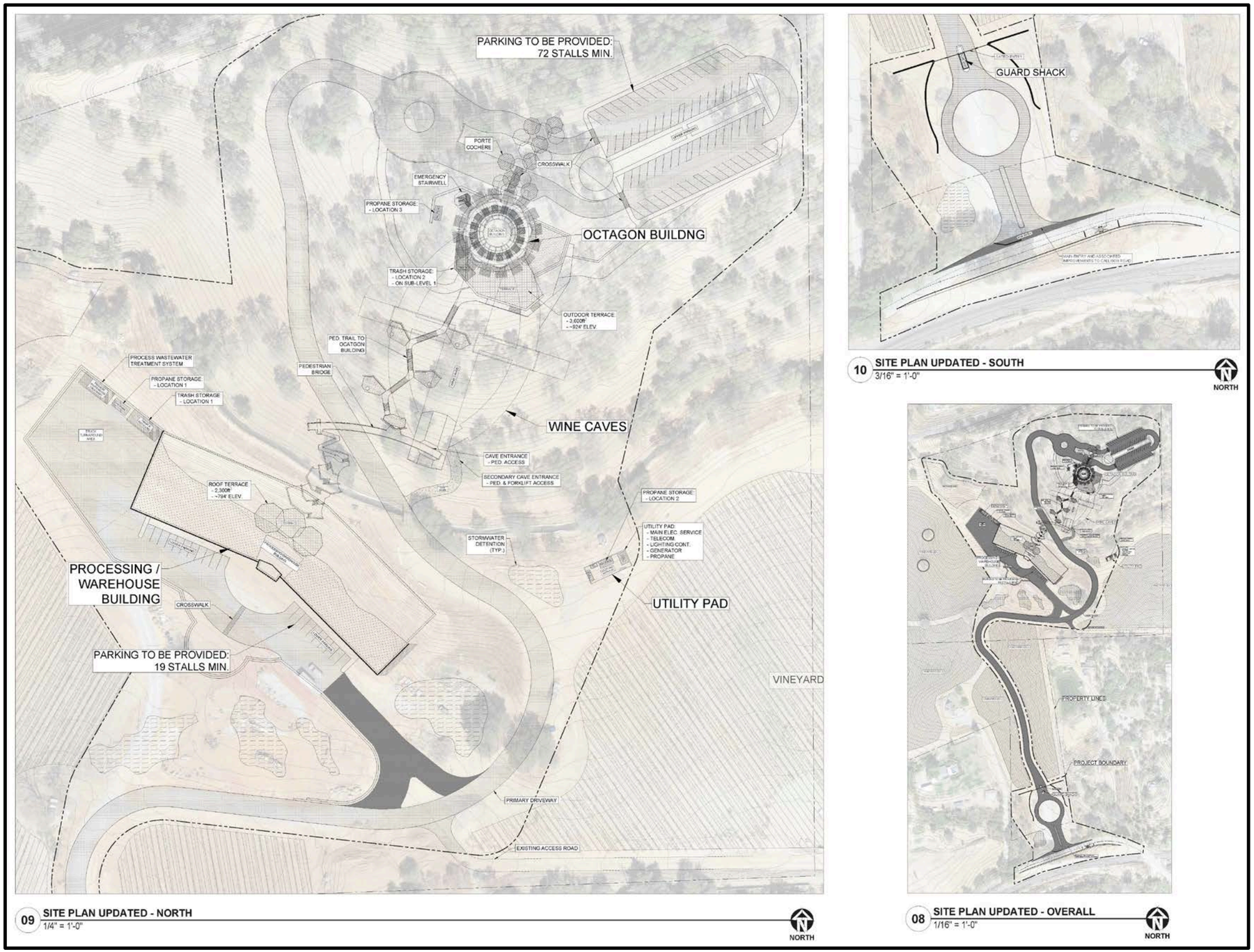


Figure 4
Illustration of Project Entry and Proposed Winery Features



Figure 5
Illustration of Proposed Winery Features [e.g., Processing/Warehouse Building and Octagon Building]



Figure 6
Cross-Section View of Octagon



The sub-level would be approximately 20 feet below grade and would total 8,000 sf. The sub-level would house the upper intake grape processing, miscellaneous utility systems for potable water, and a refrigerated area for temporary storage of incoming grapes.

Level one would be located at ground level and would serve as the primary entry for the octagon building. Level one would cover 5,600 sf, including a restroom and a 1,900-sf administration area. Level one would also include a porte cochère where wine could be picked up by patrons. The porte cochère would serve as the point of entry to the reception area where two elevators and a stairway would be provided for access to the upper levels, the below-grade processing level, and the wine cave. A 3,600-sf outdoor terrace would also be accessible from level one.

Levels two and three would be approximately 3,700 sf each. Level two would consist of an on-site residential unit, while level three would contain a commercial kitchen, storage, and patron restrooms.

The fourth above-ground level would be comprised of a tasting room and accessory restaurant. A portion of level four would be located on a turntable, which would slowly rotate 360 degrees every 45 minutes. Level four would be circular in shape and approximately 4,750 sf. Of the 4,750 sf, 950 sf along the outer perimeter of the circular floor area would be dedicated to emergency egress and 800 sf in the center of the floor area would be used for the primary ingress/egress from the elevators and stairwell. A separate elevator would be provided for staff use only that would connect the kitchen on level three to levels four and five. The remaining 3,000 sf would be divided between a 600-sf wine tasting bar, a 250-sf dedicated restaurant counter, and a 2,150-sf common seating/dining area. Please refer to the below discussion for more details of the accessory restaurant.

The top 15 feet of the structure and final level (level five) would be 3,500 sf and would primarily be used to facilitate gravity filtration of the wine during processing. Gravity filtration would be carried out by bringing the unfinished wine to the top level in 550-gallon vessels and allowing the wine to flow down to the level of the wine cave (approximately 160 feet), which would create the necessary pressure (70 pounds per square inch [psi]) for the wine to be filtered, when necessary, without the use of pumps, thus preserving the ideal molecular structure of the wine. Additionally, a private tasting room to be called the “550 Room”, totaling 550 sf, would be located on level five.

Pursuant to Section 17.44.010 and Section 17.10.010 of the Placer County Code, the maximum allowable building height for the project site is 36 feet. Therefore, the proposed project would require a variance to allow the octagon building to be built at a height of 75 feet from the finished grade (plus rooftop mechanical equipment). The rooftop mechanical equipment would be screened from view.

Processing/Warehouse Building
The processing/warehouse building would be used for bottling, product storage, supply storage, equipment storage, and shipping/receiving with an enclosed truck dock. The building would cover 23,500 sf on the ground level, 1,000 sf on a mezzanine level, and would include a 2,300-sf rooftop overlook. Approximately one third of the roof would be a “green roof”, consisting of a layer of vegetation planted over a waterproofing system. The remaining two thirds would be allocated to solar power generation. The processing/warehouse building would be located at the base of the hillside on which the octagon building would be constructed; and the warehouse building would be linked to the octagon building by a continuous meandering walkway, which would provide a surface connection between the two buildings. A minimum of 19 parking stalls, including required Americans with Disabilities Act (ADA)-compliant parking provisions, would be dedicated to the processing/warehouse building. The parking stalls would be located just west of the building, along either side of the building entrance.

Wine Cave
A network of wine caves would be constructed south of the octagon building at a maximum vertical depth of 90 feet below grade and would consist of a fermentation tank room, barrel aging rooms, collection room, two meeting rooms, and two restrooms. The wine cave would cover approximately 32,000 sf. Access would be provided from the octagon building by way of the aforementioned elevator and stairwell. In addition, pedestrian access to the southern end of the wine cave would be provided at grade level through two

pedestrian access points. A secondary access would be provided to serve as access for forklifts and utility vehicles. A minimum of 27 parking stalls to be located adjacent to the octagon building would be dedicated to serve the wine cave.

Guard Shack
A guard shack is proposed to be developed adjacent to the gates at the main entrance from Callison Road, north of the roundabout. The guard shack would consist of a 180-sf building with a bathroom and would house controls for the gates and exterior lighting for the entrance and lower roadway. One parking stall and a charging station for an electric vehicle would be provided at the guard shack.

Utility Pad
An approximately 900-sf outdoor, covered utility pad would be built into the hillside, approximately 40 feet south of the Antelope Canal, near the eastern boundary of the project site. The utility pad would be surrounded by walls on all sides and covered by a shade structure. The utility pad would host the main electrical service, a 660 kilovolt-ampere (kVA) minimum diesel or propane generator with required electrical interlock, interlock to on-site solar arrays, telecommunication panel enclosure, propane tank, and a small house panel and controller for site lighting. Access will be provided to the utility pad by the on-site roadway.

Project Operations
The principal proposed land use would be the operation of a winery that would focus on the agricultural production of high-quality wines by integrating advanced technologies. The winery's on-site business model would focus on attracting groups to learn about both the agricultural journey of the region and of the winery primarily in the form of small agricultural promotional events. Additional special events would occasionally be held, as further discussed below. It is noted that, consistent with Section 17.56.330(B) of the Winery and Farm Brewery Ordinance, tasting is allowed concurrent with on-site events.

Agricultural Promotional Events and Special Events
Agricultural Promotional Events are proposed as part of project operations in accordance with the Placer County Winery and Farm Brewery Ordinance, Section 17.56.330. In general, these events would consist of professional events and/or gatherings that support the promotion of wine being produced on-site and at other wine-making facilities in Placer County, as well as the promotion of pairing wine with food prepared with a focus on locally-sourced ingredients. Agricultural Promotional Events could occur any day of the week from 7:00 AM to 10:00 PM.

Pursuant to Section 17.56.330(D)(4)(a), Agricultural Promotional Events are not limited in number. The project applicant has indicated that up to approximately 208 Agricultural Promotional Events could take place on-site annually. The Winery and Farm Brewery Ordinance also states that an Agricultural Promotional Event accommodates fifty (50) people or less at one time (excluding staff and tasting room patrons). However, Section 17.56.330(D)(4)(a) states that, for large wineries located on forty (40) acres or greater, additional attendees may be permitted subject to a CUP. The project applicant is requesting a CUP to increase the maximum attendees at one time for Agricultural Promotional Events from 50 to 75.

Special Events, as defined by the Placer County Winery and Farm Brewery Ordinance, include greater than 50 people at one time, excluding staff and tasting room patrons. Pursuant to Section 17.56.330(B), Special Events could include private parties, fundraisers, social or educational gatherings where outside alcohol may be allowed, and events where the property owner is compensated in exchange for the use of the site and facility (referred to as a facility rental). Weddings are included in the aforementioned general categories of allowable Special Events. Special events do not include industry-wide events, the normal patronage of a tasting room, and private gatherings of the owner where the general public does not attend.

Pursuant to Table 3 of the Winery and Farm Brewery Ordinance, Special Events are allowed by right, but limited to a maximum of 12 per year. A maximum of 200 people at one time are allowed at Special Events. The proposed project would comply with the requirements included in Table 3 of the Winery and Farm Brewery Ordinance.

Outdoor Activities

Outdoor activities are proposed to take place on the terrace outside the entry level of the octagon building, as well as on the roof terrace of the processing/warehouse building during some events and throughout tasting room hours. Amplified music/live speech would occasionally take place at the aforementioned locations during outdoor activities to create ambiance. Proposed amplified music would include, but would not be limited to, live, light music such as a string quartet, chamber group, or pianist played through a small single amplifier, and would comply with Section 9.36, Noise, of the Placer County Code, as required by the Placer County Winery and Farm Brewery Ordinance. Any amplified music exceeding a volume commensurate with creating ambiance would be restricted to indoor locations only. Amplified music could take place from 10:00 AM to 5:00 PM, during events and tasting room hours, and occasionally from 5:00 PM to 8:00 PM for events only. Neither indoor nor outdoor concerts would be included in project operations.

Accessory Use – Restaurant

The proposed project would require approval of a CUP to operate a reservation-only Accessory Use – Restaurant, as defined by and allowed pursuant to the Placer County Winery and Farm Brewery Ordinance. Though subordinate to the primary services offered to guests, and while small as compared to the overall operation, the accessory restaurant is a vital component of the winery's business model. The opportunity to experience the pairing of professionally prepared foods with premiere wines is a long-established expectation in the industry and among wine afficionados and plays a pivotal role in the success of a high-end winery. The reservation-only accessory restaurant/commercial kitchen would operate from 10:00 AM to 5:00 PM for tasting room support; 11:00 AM to 2:30 PM for lunch support; 5:30 PM to 10:00 PM for formal dinner support; 7:00 AM to 10:00 PM for Agricultural Promotional Event support; and 10:00 AM to 10:00 PM for Special Event support (see Figure 7). Lunch service would be limited to a maximum of 75 patrons per day with an anticipated annual average of 27 patrons per day. Dinner service would be limited to a maximum of 98 patrons per night over multiple servings, with an anticipated annual average of 35 patrons per night. Lunch and dinner service would be offered for a maximum annual average of five days a week.

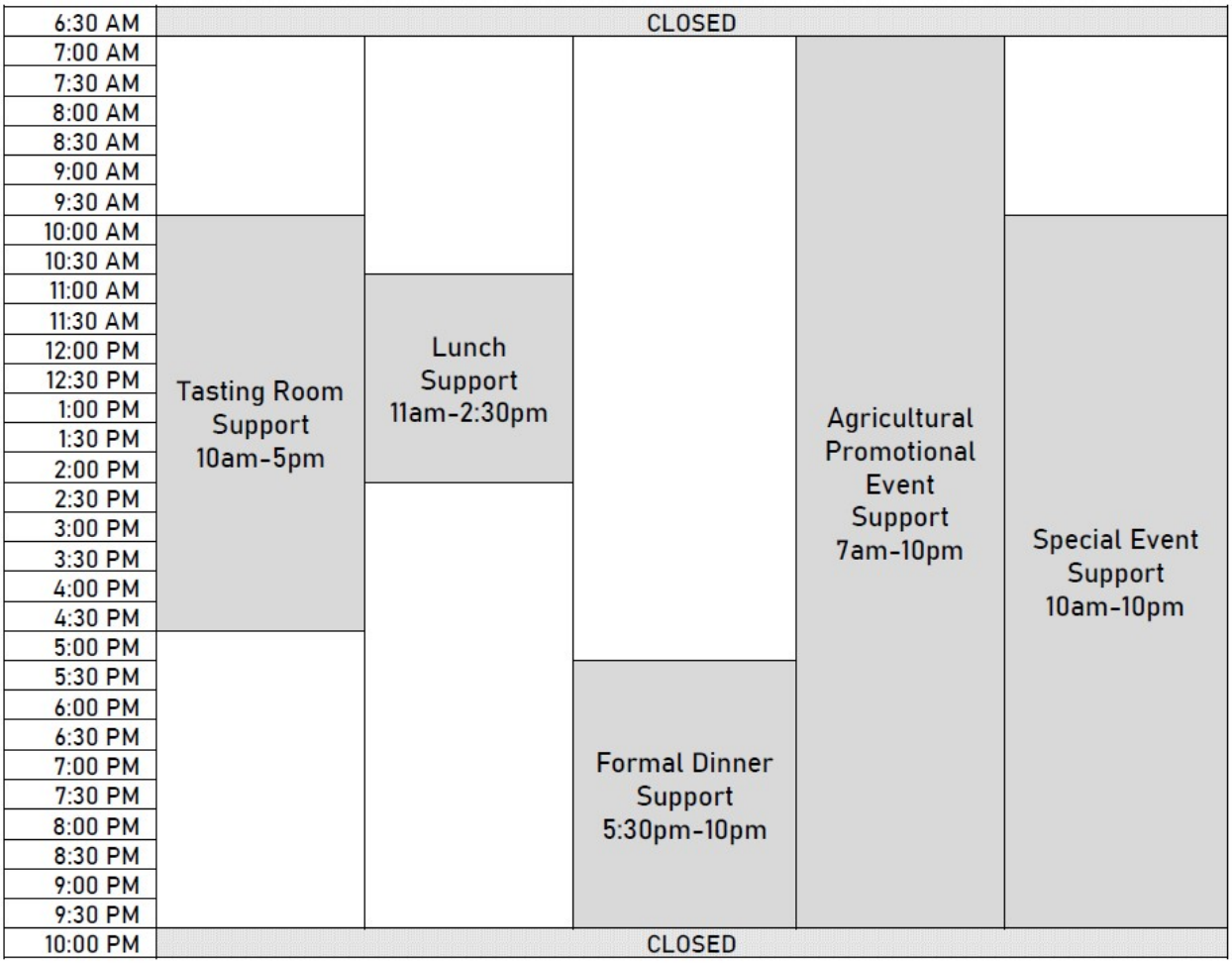
Access and Circulation

Primary vehicular access to the site would be provided directly from Callison Road, approximately 2,400 feet west of the Callison Road/Taylor Road intersection. The proposed project would include improvements to Callison Road along the project frontage to provide a 32-foot-wide paved road section per County requirements. The portion of Callison Road directly in front of the main entrance to the project site would be raised approximately three feet to achieve the County's required sight distance.

On-site circulation would include a minimum 100-foot diameter roundabout after the main entry off Callison Road. The roundabout would circle a landscaped planter area with a centrally located artistic sculpture before leading to the guard shack with a gated entry. The roundabout would provide a turnaround area in front of the gate, and access through the gate would be provided at all times during business hours. The gated entry would lead to a 23-foot-wide paved private driveway with two-foot shoulders on each side. The driveway would provide access to the processing/warehouse building, and then continue to the octagon building where an additional roundabout would be provided to allow a directional change for larger vehicles.

Access to the existing home on the western property boundary would continue to be provided by the existing shared drive off Callison Road, southwest of the project's main entrance, and would remain separate from access to the winery.

Figure 7
Restaurant Operating Schedule



Utilities and Public Services

An existing on-site public well, constructed in accordance with State and County requirements, would be used for potable water. Draw down and water quality testing has been completed on the public well and reporting shows compliance with all requirements. Irrigation water is provided on-site from PCWA from the Antelope Canal, which traverses the property. In addition, two existing, non-public wells are located on-site, which produce a total of 90 gallons per minute and could be used to replace the supply from the irrigation canal in the event the canal supply is ever temporarily interrupted.

Electricity would be provided to the project site by PG&E through a new 1,200-amp, 480-volt, 3-phase main service which would be backed up by a diesel or propane generator. The generator would be intended for emergency backup only. It should be noted that a portion of the existing overhead power and communication lines that traverse the site are currently being relocated underground by PG&E in order to reduce fire risk and enhance visual appearance. The undergrounding process is expected to be completed prior to commencement of construction of the proposed project. In addition, an on-site solar generation system would be developed as part of the proposed project. The size and design of the on-site solar generation system has yet to be determined; however, the system is proposed to be located at the upper parking lot, as well as on the roof of the processing/warehouse building.

Sanitary sewer service would be processed by an on-site septic system. It is anticipated that the septic system would be designed to limit flows to 2,500 gallons per day and would be compliant with State and

County requirements. A septic permit would be obtained from the Placer County Environmental Health Department prior to building permit issuance to allow for the development of the on-site septic system.

Completely separate from the sanitary sewer system, the proposed project would include an on-site treatment process for the winery operation process water, which would help conserve natural resources, protect ground/surface water, and overcome land constraints. The proposed project would use a High Strength Membrane BioReactor system to remove harmful pathogens and other harmful bacteria from process water to allow for water reuse for vineyard irrigation, landscape areas, water features/fountains, and/or dust control. The High Strength Membrane BioReactor system is Napa Green Certified and could be scaled depending on the time of the year and/or processing needs. The process water treatment system would be located adjacent to the processing/warehouse building in the turnaround area on the westerly side of the project site. The system would be above ground and would be similar in appearance to two, 20-foot cargo containers placed side by side, occupying approximately 400 sf.

Propane would be stored on-site in three, 2,500-gallon tanks, which would be located in the eastern portion of the project site, near the truck turnaround area; at the utility pad; and adjacent to the octagon building. Propane would primarily be used for space conditioning, hot water heating for wine processing, operating the necessary equipment in the commercial kitchen, and powering the emergency backup generator.

Recology Auburn Placer would provide trash and recycling collection services for the proposed project. Trash and recycling would be stored in two locations on-site, adjacent to the processing/warehouse building and on the sub-level of the octagon building.

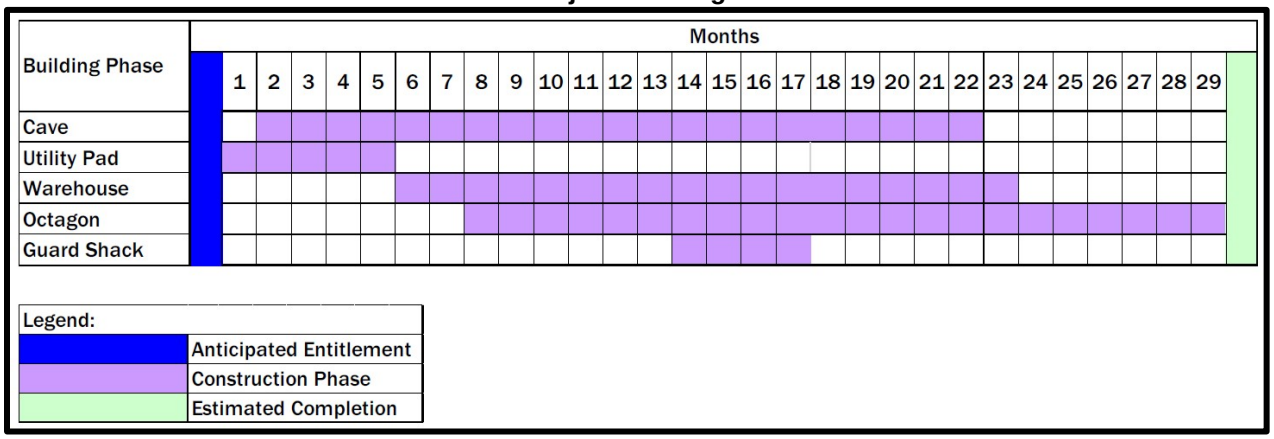
The southern portion of project site would use a single-point drainage outlet for storm water runoff, which would flow into a proposed detention/settling pond before exiting the property through an existing storm drain pipe ultimately flowing into an existing culvert along the south side of Callison Road, which would be raised as part of the proposed project. The pond's intake would be filtered to remove sediment produced by construction and farming operations. The northern portion of the project site would use grassland filtration techniques.

Site Work and Project Phasing

Approximately 190,000 cubic yards of fill, 165,000 cubic yards of cut, and 25,000 cubic yards of excavation, including the wine cave, would occur, creating a balance on site.

Construction of the proposed project would occur over an approximate 20-month period. The construction is anticipated to be phased as shown in Figure 8, below.

Figure 8
Project Phasing



1.4 Requested Entitlements

The proposed project would require County approval of the following discretionary actions:

- CUP for the operation of a Large Winery on 40+ acres with operation of an Accessory Use – Restaurant, and an increase from 50 to 75 maximum attendees at one time for Agricultural Promotional Events; and
- Variance allowing an occupied agricultural structure at a height of 75 feet plus mechanical equipment.

2.0 PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

Consistent with Appendix G of the CEQA Guidelines, the County anticipates that the EIR will contain the following chapters:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils/Mineral Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services and Utilities
- Transportation
- Tribal Cultural Resources
- Wildfire
- Effects Not Found to be Significant
- Statutorily Required Sections
- Alternatives Analysis

Each technical chapter of the EIR will include identification of the thresholds of significance, identification of project-level and cumulative impacts, and the development of mitigation measures and monitoring strategies, as required. The proposed EIR will incorporate by reference the Placer County General Plan, the Placer County General Plan EIR, and the Horseshoe Bar/Penryn Community Plan. In addition to County documents, project-specific technical studies are being prepared by technical experts for the proposed project.

The following paragraphs summarize the anticipated analyses that will be included in the EIR.

Aesthetics: The Aesthetics chapter of the EIR will summarize existing regional and project area aesthetics and visual setting. To the extent applicable, the chapter will describe project-specific aesthetics issues such as scenic vistas, trees, historic buildings, scenic highways, existing visual character or quality of the project area, as well as light and glare. Pursuant to Appendix G of the CEQA Guidelines, the focus of the analysis concerning the project's effects on visual character or quality of the project site and its surroundings will be on whether the proposed project will substantially degrade the existing visual character or quality of public views of the site and its surroundings. The analysis will rely on photo simulations to determine whether the project would substantially degrade the visual character or quality of the site and its surroundings.

Agriculture and Forestry Resources: The Agriculture and Forestry Resources chapter of the EIR will provide information in regard to the existing setting relative to agricultural resources on the project site. The chapter will be based on a review of maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as well as the types of on-site soils, determined through a Web Soil Survey conducted using the USDA Natural Resources Conservation Service website. The chapter will identify thresholds of significance applicable to the proposed project and the impacts will be measured against the thresholds of significance. Appropriate mitigation measures and monitoring strategies consistent with the policies of Placer County will be identified, if necessary. The chapter will also focus on the forestry resources present throughout the northern portion of the study area. In particular, pursuant to CEQA Guidelines Appendix G,

the chapter will address the project's potential to result in the loss of forest land or conversion of forest land to non-forest use.

Air Quality and Greenhouse Gas Emissions: The air quality and greenhouse gas (GHG) emissions analysis for the proposed project will be performed using the California Emissions Estimator Model (CalEEMOD) software program and following Placer County Air Pollution Control District (PCAPCD) CEQA Guidelines.

In general, the air quality impact analysis will include a quantitative assessment of short-term (i.e., construction) and long-term (i.e., operational) increases of criteria air pollutant emissions of primary concern (i.e., ROG, NO_X, and PM_{10}). The project's cumulative contribution to regional air quality will be discussed, based in part on the modeling conducted at the project level. The analysis will also address any potential odor impacts that may occur, as well as toxic air contaminant (TAC) emissions.

The GHG emissions analysis will include a quantitative estimate of carbon dioxide equivalent emissions from the proposed project, including indirect emissions (e.g., electricity, natural gas) and construction emissions. The chapter will include an analysis of the project's consistency with the Placer County Sustainability Plan (PCSP).

The significance of air quality and GHG impacts will be determined in comparison to PCAPCD significance thresholds. PCAPCD-recommended mitigation measures, and PCSP strategies will be incorporated, if needed and applicable, to reduce any significant air quality impacts, and anticipated reductions in emissions associated with proposed mitigation measures will be quantified.

Biological Resources: The Biological Resources chapter of the EIR will summarize the setting and describe the potential project effects to plant communities, trees, wildlife, and wetlands, including adverse effects on rare, endangered, candidate, sensitive, and other special-status species for the project site. Effects associated with all on-site and off-site improvements will be included in the analysis. Analysis in the chapter will be based on a Biological Resources Assessment, as well as an Aquatic Resources Delineation Report and an Arborist Report to be prepared specifically for the proposed project. The aforementioned reports will include an analysis of the project's impacts to oak woodlands and will evaluate the project's consistency with the recently adopted Placer County Conservation Program (PCCP), given that the project site is within the Plan area. Mitigation measures for all identified impacts will be developed consistent with applicable laws and regulations.

Cultural Resources: The Cultural Resources chapter of the EIR will describe the potential effects to historical, archaeological, and paleontological resources from buildout of the proposed project. Analysis in the chapter will be based on a Cultural Resources Assessment prepared for the proposed project, which will include the results of a field survey and records search. Effects associated with all on-site and off-site improvements will be included in the analysis.

Energy: The Energy chapter of the EIR will evaluate whether the proposed project could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. The chapter will also evaluate whether the proposed project would conflict with or obstruct a State or local plan for renewable energy. The chapter will review the PCSP to identify energy-related measures that may be applicable to the proposed project.

Geology and Soils/Mineral Resources: The Geology and Soils/Mineral Resources chapter of the EIR will summarize the setting and describe the potential effects from soil erosion, earthquakes, liquefaction, and expansive/unstable soils, as well as identify any known unique geological features within the project area. The chapter will be based primarily on a site-specific Geotechnical Report and a Preliminary Grading Plan prepared for the proposed project. Given the anticipated tunneling for the proposed wine cave, the chapter will also consider the suitability of the substratum for such a feature, and the need for any special design measures. Standard County mitigation measures pertaining to geology and soils will be incorporated into the chapter. In addition, the chapter will discuss the potential for the project to result in the loss of availability of a known mineral resource or locally-important mineral resource recovery site.

Hazards and Hazardous Materials: The Hazards and Hazardous Materials chapter of the EIR will summarize the setting and describe any potential for existing or possible hazardous materials within the project area, including, but not limited to, any lead or asbestos associated with the existing on-site structures, overhead/underground utility lines, or soil contamination associated with pesticides and/or termiticides. The chapter will also assess the potential for the proposed project to create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials.

Impacts of the environment on a project (as compared to impacts of a project on the environment) are beyond the scope of required CEQA review. The California Supreme Court has held that, "CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents. What CEQA does mandate… is an analysis of how a project might exacerbate existing environmental hazards." As such, the mere presence of possible hazardous materials at the site or in the vicinity, should such exist, would be considered an existing environmental condition and, thus, would not be considered an impact under CEQA. Rather, the proposed project could have the potential to result in an impact associated with possible hazardous materials should the proposed project exacerbate the existing conditions (e.g., contaminated soils become airborne during ground-disturbing activities and expose construction workers or neighboring residents of the proposed project). The chapter will primarily be based on a site-specific Environmental Site Assessment.

Hydrology and Water Quality: The Hydrology and Water Quality chapter of the EIR will summarize setting information and identify potential impacts on stormwater drainage, flooding, groundwater, and water quality, including stormwater runoff water quality, and water quality of the on-site PCWA canal. The analysis included in the Hydrology and Water Quality chapter will rely on a site-specific Drainage Report (including flooding) and Storm Water Quality Plan to evaluate impacts such as increases in stormwater flows, potential downstream flooding, and on-site facilities necessary to treat and detain on-site runoff. Standard County mitigation measures pertaining to hydrology and water quality will be incorporated into the chapter.

Land Use and Planning: The Land Use and Planning chapter of the EIR will evaluate the consistency of the proposed project with the policies and regulations included in the Placer County General Plan, Horseshoe Bar/Penryn Community Plan, and Placer County Code, as well as any other appropriate documents to address any policy or consistency issues due to the project entitlements. Pursuant to Appendix G of the CEQA Guidelines, the consistency discussion will focus on policies adopted for the purpose or avoiding or mitigating environmental effects.

Noise: The Noise chapter of the EIR will be based on a project-specific Noise Study. The chapter will address potential noise impacts resulting from project construction and operation, including but not necessarily limited to traffic noise levels on the local roadway network and amplified music during the proposed on-site events. Noise-sensitive land uses or activities in the project vicinity will be identified and ambient noise and vibration level measurements on, and in the vicinity of the project site, will be conducted to quantify existing background noise and vibration levels for comparison to the predicted project-generated levels. Noise exposure levels will then be compared to applicable County noise level criteria. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Public Services and Utilities: The Public Services portion of the chapter will evaluate whether the project could increase demands upon local service providers (e.g., fire, law enforcement) such that physical improvements would be required to existing facilities, or new facilities would be required, the construction of which could cause physical impacts to the environment. Information from local service providers regarding their ability to adequately service the anticipated demands resulting from the proposed development will be incorporated into the chapter.

The Utilities portion of the chapter will evaluate the project's increase in water supply demand and wastewater generation, and whether the existing water and sewer infrastructure systems can accommodate the demands from the project, or whether upgrades to the systems would be required. The Utilities section would also estimate the amount of solid waste generated by the project and the receiving landfill's capacity to accommodate the increase in solid waste. Other utility systems that would be considered in this chapter include electricity and natural gas.

Transportation: The Transportation chapter of the EIR will be based on a Vehicle Miles Traveled (VMT) analysis prepared specifically for the proposed project. Consistent with CEQA Guidelines Section 15064.3, which became effective statewide on July 1, 2020, impact determination for CEQA purposes will be based on VMT. The VMT analysis will be prepared consistent with Placer County's adopted guidance regarding analysis of VMT.

The proposed project's impacts to alternative modes such as pedestrian, bicycle, and transit facilities will be assessed based on their significance criteria contained in the adopted Placer County guidelines. The EIR chapter will also include an analysis of the proposed project's potential impacts related to conflicting with applicable programs, policies, and ordinances addressing the circulation system, vehicle safety hazards, and emergency access. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Tribal Cultural Resources: The Tribal Cultural Resources chapter will describe the potential effects to tribal cultural resources from buildout of the proposed project. The County will conduct Native American tribal consultation pursuant to Assembly Bill (AB) 52. Any input from tribes will be incorporated into the Tribal Cultural Resources chapter. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Wildfire: The Wildfire chapter of the EIR will address the questions in Section XX, Wildfire, of Appendix G of the CEQA Guidelines. Specifically, the proposed project will be evaluated to determine if the project would substantially impair an adopted emergency response plan or emergency evacuation plan. In addition, the chapter will consider whether the proposed project would exacerbate fire risk, as well as whether the project would expose people or structures to significant post-fire risks, including downslope or downstream flooding or landslides. Mapping prepared by the California Department of Forestry and Fire Protection (CAL FIRE) regarding fire hazard severity zones and State Responsibility Areas will be reviewed, and if necessary, the analysis will include consultation with CAL FIRE.

Effects Not Found to be Significant: Section 15128 of the CEQA Guidelines states that an EIR shall contain a brief statement indicating the reasons that various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. Accordingly, the Effects Not Found to be Significant chapter of the EIR will include abbreviated discussions of impacts determined not to be significant.

Statutorily Required Sections: Pursuant to CEQA Guidelines Section 21100(B)(5), the Statutorily Required Sections chapter of the EIR will address the potential for growth-inducing impacts of the proposed project, focusing on whether removal of any impediments to growth would occur with the proposed project. A summary of the significant and unavoidable impacts identified within the EIR will be included in this chapter, as well as a discussion of significant irreversible impacts. The chapter will generally describe the cumulative setting for the proposed project; however, a detailed description of the subject-specific cumulative setting, as well as analysis of the cumulative impacts, will be included in each technical chapter of the EIR.

Alternatives Analysis: In accordance with Section 15126.6(a) of the CEQA Guidelines, the EIR will include an analysis of a range of alternatives, including a No Project Alternative. Consideration will be given to potential off-site locations consistent with CEQA Guidelines, Section 15126.6(f)(2), and such locations will be determined in consultation with County staff. If it is determined that an off-site alternative is not feasible, the EIR will include a discussion describing why such a conclusion was reached. The project alternatives will be selected when more information related to project impacts is available in order to be designed to reduce significant project impacts. The chapter will also include a section describing alternatives considered but dismissed, if necessary. The Alternatives Analysis chapter will describe the alternatives and identify the environmentally superior alternative. The alternatives will be analyzed at a level of detail less than that of the proposed project; however, the analyses will include sufficient detail to allow a meaningful comparison of the impacts. Such detail may include conceptual site plans for each alternative, basic quantitative traffic information (e.g., trip generation), as well as a table that will compare the features and the impacts of each alternative to the project.

APPENDIX B

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

February 3, 2022

Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

Subject: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED PROJECT 8 WINERY
SCH# 2022010188

Dear Ms. Herrington:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation of an Environmental Impact Report (EIR) from the Placer County Community Development Resource Agency for the Project 8 Winery Project (Project) in Placer County pursuant the California Environmental Quality Act (CEQA) statute and guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants, and their habitats. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration

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regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project site is located at 7615 Callison Road in the community of Penryn, within unincorporated Placer County. The proposed Project would be located on portions of several parcels consisting of Assessor's Parcel Numbers [APNs] 031-220-061, 032-124-080, and 032-124-044, totaling 44.14 acres. The proposed Project site, or improvement area, consists of approximately 18 acres of the 44.14-acre parcel area.

The proposed Project would develop a full production winery, generally including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and associated facilities on approximately 17.96 acres of the 44.14-acre parcel area. Above-ground structures would primarily consist of a 75-foot tall, 29,250-square-foot (sf) octagon building on the northern hillside of the Project site, and a 23,500-sf processing/warehouse building to the south of the octagon building. In addition, a 72-stall minimum parking lot would be developed east of the octagon building, and a 19-stall minimum parking lot would be developed to the west of the processing building. Other on-site development would include a 180-sf guard shack and a 900-sf outdoor utility pad. The proposed Project would include a new driveway encroachment into the site from Callison Road. The new gated, private driveway would begin at Callison Road and wind up the hillside, connecting to the processing building and octagon building, before ending at the parking lot east of the octagon building.

The Project description in the EIR should include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment stage area, spoils areas, adjacent infrastructure development, staging areas and access and haul roads if applicable.

As required by § 15126.6 of the CEQA Guidelines, the EIR should include an appropriate range of reasonable and feasible alternatives that would attain most of the basic Project objectives and avoid or minimize significant impacts to resources under CDFW's jurisdiction.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations presented below to assist Placer County in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming EIR address the following:

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Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends that the EIR specifically include:

1. An assessment of all habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW recommends that the California Natural Diversity Database (CNDDB), as well as previous studies performed in the area, be consulted to assess the potential presence of sensitive species and habitats. A nine United States Geologic Survey 7.5-minute quadrangle search is recommended to determine what may occur in the region, larger if the Project area extends past one quad (see *Data Use Guidelines* on the Department webpage www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data). Please review the webpage for information on how to access the database to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the Project. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

   Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site. Other sources for identification of species and habitats near or adjacent to the Project area should include, but may not be limited to, State and federal resource agency lists, California Wildlife Habitat Relationship System, California Native Plant Society Inventory, agency contacts, environmental documents for other projects in the vicinity, academics, and professional or scientific organizations.

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3. A complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. The EIR should include the results of focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Species-specific surveys should be conducted in order to ascertain the presence of species with the potential to be directly, indirectly, on or within a reasonable distance of the Project activities. CDFW recommends the lead agency rely on survey and monitoring protocols and guidelines available at: www.wildlife.ca.gov/Conservation/Survey-Protocols. Alternative survey protocols may be warranted; justification should be provided to substantiate why an alternative protocol is necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought or deluge.

4. A thorough, recent (within the last two years), floristic-based assessment of special-status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see www.wildlife.ca.gov/Conservation/Plants).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The EIR should provide a thorough discussion of the Project's potential direct, indirect, and cumulative impacts on biological resources. To ensure that Project impacts on biological resources are fully analyzed, the following information should be included in the EIR:

1. The EIR should define the threshold of significance for each impact and describe the criteria used to determine whether the impacts are significant (CEQA Guidelines, § 15064, subd. (f)). The EIR must demonstrate that the significant environmental impacts of the Project were adequately investigated and discussed and it must permit the significant effects of the Project to be considered in the full environmental context.

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2. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by Project activities especially those adjacent to natural areas, exotic and/or invasive species occurrences, and drainages. The EIR should address Project-related changes to drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

3. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Conservation or Recovery Plan, or other conserved lands).

4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. The EIR should discuss the Project's cumulative impacts to natural resources and determine if that contribution would result in a significant impact. The EIR should include a list of present, past, and probable future projects producing related impacts to biological resources or shall include a summary of the projections contained in an adopted local, regional, or statewide plan, that consider conditions contributing to a cumulative effect. The cumulative analysis shall include impact analysis of vegetation and habitat reductions within the area and their potential cumulative effects. Please include all potential direct and indirect Project-related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and/or special-status species, open space, and adjacent natural habitats in the cumulative effects analysis.

Mitigation Measures for Project Impacts to Biological Resources

The EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW also recommends that the environmental documentation provide scientifically supported discussion regarding adequate avoidance, minimization, and/or mitigation measures to address the Project's significant impacts upon fish and wildlife and their habitat. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

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1. *Fully Protected Species*: Several Fully Protected Species (Fish & G. Code § 3511) have the potential to occur within or adjacent to the Project area, including, but not limited to: white-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and California black rail (*Laterallus jamaicensis coturniculus*). Fully protected species may not be taken or possessed at any time. Project activities described in the EIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the EIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer 2009). The EIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

3. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration, enhancement, or permanent protection should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The EIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

4. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in the regional ecosystems and native plant restoration techniques. Plans should identify the assumptions used

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to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be appropriately timed to ensure the viability of the seeds when planted. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project. Examples may include retention of woody material, logs, snags, rocks, and brush piles. Fish and Game Code sections 1002, 1002.5 and 1003 authorize CDFW to issue permits for the take or possession of plants and wildlife for scientific, educational, and propagation purposes. Please see our website for more information on Scientific Collecting Permits at www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-.

5. *Nesting Birds:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). CDFW implemented the MBTA by adopting the Fish and Game Code section 3513. Fish and Game Code sections 3503, 3503.5 and 3800 provide additional protection to nongame birds, birds of prey, their nests and eggs. Sections 3503, 3503.5, and 3513 of the Fish and Game Code afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant thereto; section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the Fish and Game Code or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as

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provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Potential habitat for nesting birds and birds of prey is present within the Project area. The Project should disclose all potential activities that may incur a direct or indirect take to nongame nesting birds within the Project footprint and its vicinity. Appropriate avoidance, minimization, and/or mitigation measures to avoid take must be included in the EIR.

CDFW recommends that the EIR include specific avoidance and minimization measures to ensure that impacts to nesting birds or their nests do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. In addition to larger, protocol level survey efforts (e.g. Swainson's hawk surveys) and scientific assessments, CDFW recommends a final preconstruction survey be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted earlier.

6. *Moving out of Harm's Way:* The Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, the lead agency may condition the EIR to require that a qualified biologist with the proper permits be retained to be onsite prior to and during all ground- and habitat-disturbing activities. The qualified biologist with the proper permits may move out of harm's way special-status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). It should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for habitat loss.

7. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as these efforts are generally experimental in nature and largely unsuccessful.

The EIR should incorporate mitigation performance standards that would ensure that impacts are reduced to a less-than-significant level. Mitigation measures proposed in the EIR should be made a condition of approval of the Project. Please note that obtaining a permit from CDFW by itself with no other mitigation proposal may constitute mitigation deferral. CEQA Guidelines section 15126.4, subdivision (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. To

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avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

California Endangered Species Act

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

CESA-listed species with the potential to occur in the area include but are not limited to: foothill yellow-legged frog (*Rana boylii*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), willow flycatcher (*Empidonax traillii*), tricolored blackbird (*Agelaius tricolor*), and Swainson's hawk (*Buteo swainsoni*).

The EIR should disclose the potential of the Project to take CESA-listed species and how the impacts will be avoided, minimized, and mitigated. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To issue an ITP, CDFW must demonstrate that the impacts of the authorized take will be minimized and fully mitigated (Fish & G. Code §2081 (b)). To facilitate the issuance of an ITP, if applicable, CDFW recommends the EIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. CDFW encourages early consultation with staff to determine appropriate measures to facilitate future permitting processes and to engage with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service to coordinate specific measures if both state and federally listed species may be present within the Project vicinity.

Native Plant Protection Act

The Native Plant Protection Act (Fish & G. Code §1900 *et seq*.) prohibits the take or possession of State-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Take of State-listed rare and/or endangered plants due to Project activities may only be permitted through an ITP or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

Lake and Streambed Alteration Program

The EIR should identify all perennial, intermittent, and ephemeral rivers, streams, lakes, other hydrologically connected aquatic features, and any associated biological resources/habitats present within the entire Project footprint (including utilities, access and staging areas). The environmental document should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-

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mentioned features and associated biological resources/habitats that may occur because of the Project. If it is determined the Project will result in significant impacts to these resources the EIR shall propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Section 1602 of the Fish and Game Code requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

If CDFW determines that the Project activities may substantially adversely affect an existing fish or wildlife resource, a Lake and Streambed Alteration (LSA) Agreement will be issued which will include reasonable measures necessary to protect the resource. CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if one is necessary, the EIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the Project may avoid or reduce impacts to fish and wildlife resources. To submit an LSA Notification package, please go to https://www.wildlife.ca.gov/Conservation/Environmental-Review/LSA.

Please note that other agencies may use specific methods and definitions to determine impacts to areas subject to their authorities. These methods and definitions often do not include all needed information for CDFW to determine the extent of fish and wildlife resources affected by activities subject to Notification under Fish and Game Code section1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction (such as United States Army Corps of Engineers) when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. CDFW recommends lead agencies coordinate with us as early as possible, since potential modification of the proposed Project may avoid or reduce impacts to fish and wildlife resources and expedite the Project approval process.

The following information will be required for the processing of an LSA Notification and CDFW recommends incorporating this information into any forthcoming CEQA document(s) to avoid subsequent documentation and Project delays:

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1. Mapping and quantification of lakes, streams, and associated fish and wildlife habitat (e.g., riparian habitat, freshwater wetlands, etc.) that will be temporarily and/or permanently impacted by the Project, including impacts from access and staging areas. Please include an estimate of impact to each habitat type.

2. Discussion of specific avoidance, minimization, and mitigation measures to reduce Project impacts to fish and wildlife resources to a less-than-significant level. Please refer to section 15370 of the CEQA Guidelines.

Based on review of Project materials, aerial photography, and observation of the site from public roadways, the Project site may support unnamed tributaries to Antelope Creek, Secret Ravine, and associated riparian habitat. CDFW recommends that the EIR fully identify the Project's potential impacts to the stream and/or its associated vegetation and wetlands.

Placer County Conservation Program

The Project is located within the Foothills Potential Future Growth Area of the Placer County Conservation Program (PCCP). The PCCP includes three distinct integrated components: the Western Placer County Habitat Conservation Plan and Natural Community Conservation Plan, the Western Placer County Aquatic Resources Program, and the Western Placer County In-Lieu Fee Program.

CEQA Guidelines section 15125(d) states that EIRs must discuss any inconsistencies between projects and applicable plans (including habitat conservation plans/natural community conservation plans). Because the PCCP is approved and in implementation, CDFW recommends the EIR include a discussion of each Project alternative's consistency with the PCCP and how the County will ensure that implementation of the Project alternatives do not impede the PCCP's ability to meet its biological goals and objectives.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an effect on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by

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the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670.

CDFW appreciates the opportunity to comment on the Notice Of Preparation of the EIR for the Project 8 Winery Project and recommends that Placer County address CDFW's comments and concerns in the forthcoming EIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts.

If you have any questions regarding the comments provided in this letter or wish to schedule a meeting and/or site visit, please contact Patrick Moeszinger, Senior Environmental Scientist (Specialist) at (916) 767-3935 or patrick.moeszinger@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Juan Torres for
FB2E6AFEDBDE458...
Kelley Barker
Environmental Program Manager

ec: Juan Torres, Senior Environmental Scientist (Supervisory)
Patrick Moeszinger, Senior Environmental Scientist (Specialist)
Department of Fish and Wildlife

Office of Planning and Research, State Clearinghouse, Sacramento

Literature Cited

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/

California Department of Transportation

DISTRICT 3
703 B STREET | MARYSVILLE, CA 95901-5556
(530) 513-0584 | FAX (530) 741-4245 TTY 711
www.dot.ca.gov/dist3

February 11, 2022

GTS# 03-PLA-2022-00901
03-PLA-193-7.85
SCH # N/A

Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Project 8 Winery (Formerly Penryn Winery)

Dear Ms. Herrington:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. We reviewed this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision, and goals, some of which includes addressing equity, climate change, and safety, as outlined in our statewide plans such as the California Transportation Plan, Caltrans Strategic Plan, and Climate Action Plan for Transportation Infrastructure.

The comments below are based on the NOP circulated for review regarding the proposed development of a 17.96-acre winery across three parcels at 7615 Callison Road in Penryn, CA.

Traffic Operations – Highway Operations

The traffic study for this project should include the following intersections including trip generation:

- SR 193 and Taylor Road
- SR 193 and SR 80
- SR 80 and Newcastle Road

If you have any questions regarding these comments or require additional information, please contact David Dosanjh, Intergovernmental Review Coordinator for Placer County, by phone (530) 565-3905 or via email to David.Dosanjh@dot.ca.gov.

Sincerely,

Kevin Yount

KEVIN YOUNT, Branch Chief
Office of Transportation Planning
Regional Planning Branch—East

Pacific Gas and Electric Company

Plan Review Team
Land Management

PGEPlanReview@pge.com

January 18, 2022

Shirlee I. Herrington
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603

Ref: Gas and Electric Transmission and Distribution

Dear Shirlee,

Thank you for submitting Project 8 Winery (PLN21-00198) plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en_US/business/services/building-and-renovation/overview/overview.page.

2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.

3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management

Pacific Gas and Electric Company

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line ‘kicker blocks’, storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E’s ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4’) in height at maturity may be planted within the easement area.

11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING."**

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

Pacific Gas and Electric Company

Plan Review Team
Land Management

PGEPlanReview@pge.com

February 18, 2022

Shirlee I. Herrington
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603

Re: Project 8 Winery (PLN21-00198)
7615 Callison Road, Penryn, CA 95663

Dear Shirlee:

Thank you for providing PG&E the opportunity to review your proposed plans for Project 8 Winery (PLN21-00198) dated 1/13/2022. Our review indicates your proposed improvements do not appear to directly interfere with existing PG&E facilities or impact our easement rights.

Please note this is our preliminary review and PG&E reserves the right for additional future review as needed. This letter shall not in any way alter, modify, or terminate any provision of any existing easement rights. If there are subsequent modifications made to your design, we ask that you resubmit the plans to the email address listed below.

If you require PG&E gas or electrical service in the future, please continue to work with PG&E's Service Planning department: https://www.pge.com/cco/.

As a reminder, before any digging or excavation occurs, please contact Underground Service Alert (USA) by dialing 811 a minimum of 2 working days prior to commencing any work. This free and independent service will ensure that all existing underground utilities are identified and marked on-site.

If you have any questions regarding our response, please contact the PG&E Plan Review Team at (877) 259-8314 or pgeplanreview@pge.com.

Sincerely,

PG&E Plan Review Team
Land Management

18 February 2022

Shirlee Herrington
Placer County
3091 County Center Drive
Auburn, CA 95603
sherring@placer.ca.gov

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, PROJECT 8 WINERY (PLN21-00198) PROJECT, SCH#2022010188, PLACER COUNTY

Pursuant to the State Clearinghouse's 13 January 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Project 8 Winery (PLN21-00198) Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of

Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Waste Discharge Requirements – Discharges to Land

The discharge of winery wastewater and residual solids to land is subject to regulation under individual WDRs or Central Valley Water Board Order R5-2015-0005 (the Conditional Waiver of Waste Discharge Requirements for Small Food Processors, Small Wineries and Related Agricultural Processors within the Central Valley Region, or Waiver). The Waiver is structured to regulate winery waste discharge on a tiered basis, based on the volume of waste discharged to land annually. In accordance with California Water Code Section 13260, the project proponent is required to submit a Report of Waste Discharge (RWD) to apply for the Waiver. We recommend that the RWD be submitted 12 to 18 months before the expected startup date.

Pursuant to the State Board's Onsite Wastewater Treatment Systems Policy, the regulation of the septic system may be regulated under the local agency's management program.

For more information on waste discharges to land, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/index.shtml

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4709 or Greg.Hendricks@waterboards.ca.gov.



Greg Hendricks
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Shirlee Herrington

From: Leslie Warren <lesliewarren52@gmail.com>
Sent: Saturday, February 12, 2022 7:21 PM
To: Shirlee Herrington
Cc: Jeanne Wilson; Shane Hanofee
Subject: [EXTERNAL] Proposed Project 8 Winery Berkema feedback

Dear Shirlee,

The subject proposed project would require the approval of a Conditional Use Permit (CUP) for the construction and operation of a Large, and to allow an increase from 50 to 75 maximum attendees (at one time) for Agricultural Promotional Events; as well Winery on 40+ acres, the operation of an accessory restaurant as a Variance to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

On behalf of the California Native Plant Society, Redbud Chapter, I am writing to express our concern about the subject project because of its impact on grasslands, which are proposed to be converted to vineyard and commercial structures.

Has the County's analysis considered the fact that tilling and grading for vineyard will loosen dirt, disturb microorganisms that live within it and release carbon into the atmosphere? How much stored carbon will be released with construction of the proposed agricultural practice? How would carbon emissions be offset?

Tilling the soil will contribute to groundwater depletion as it will adversely affect soils' ability to retain precipitation. To what degree will this project contribute to groundwater depletion?

The 40 acre project site is primarily grassland. Has the County considered that grasses are powerful devices for drawing down carbon from the atmosphere? Has the County undertaken a comprehensive and cumulative assessment of how much grassland in Placer County has been lost to other uses in the past 50, 25, 10 years? Please explain how Placer County is monitoring grassland conversion and the cumulative impact of Countywide conversion on native flora and fauna populations; including insects as declines pollinators, including bees, butterflies and moths is directly attributable to loss of grasslands.

If this project depends upon groundwater:

1) how much water will be pumped annually and how will ground water pumping be monitored?
2) does the project have the potential to adversely affect existing well users?
3) what is the County's policy for managing groundwater drawdown?

How will the impervious surfaces proposed as a part of this project contribute seasonally to increasing local ambient temperatures? Increasing temperatures increases plants' need for water, affecting plants growth, reproduction and resilience.

Thank you for your attention to these questions snd concerns.

Sincerely,

Leslie Warren
Co-chair

Conservation Advocacy Committee
CNPS Redbud

Sent from my iPhone

Shirlee Herrington

From: Defend Granite Bay - A Community Association <defendgb@gmail.com>
Sent: Friday, February 11, 2022 1:00 PM
To: Shirlee Herrington
Cc: GBCA; Alliance For Environmental Leadership; public-interest@live.com; Michael Garabedian
Subject: [EXTERNAL] Notice of Preparation of an EIR for the proposed Project 8 Winery Comments

Defend Granite Bay



Thank you for the opportunity to comment on the Notice of Preparation of an Environmental Impact Report for the Proposed Project 8 Winery.

The proposed project would require the approval of a Conditional Use Permit (CUP) for the construction and operation of a Large Winery on 40+ acres, the operation of an accessory restaurant, and to allow an increase from 50 to 75 maximum attendees (at one time) for Agricultural Promotional Events; as well as a Variance to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Concerns include the following items:

1) Is adequate septic, water and parking proposed to accommodate a greater number of guests per ag promotional event?

2) Will additional traffic fees be required to mitigate for additional VMT and how will this increase impact Placer County VMT targets?

3) If the property is a Williamson Act parcel, will the applicant revoke the Williamson Act status since the commercial restaurant, kitchen and dining room exceed 1200 sq ft. (see Government Code § 51250 (b))?

The developer intentionally purchased a property which was sloped to accommodate gravity flow for extraction and to enhance water recycling.

4) An explanation of how the requested 75 ft is in compliance with California Government Code Section 65906.

The northerly parcel is zoned F-B-X 20-Acre Minimum; and the remaining parcels are zoned RA-B-100.

5) Neither zoning district allows for commercial restaurants (see 17.10.010 and 17.06.050). How is formal seating for lunch and dinner “related to” the primary use on a property as a winery or farm brewery.

6) Will additional traffic mitigation fees be required for the increased intensity of use?

The Defend Granite Bay Board and members

PUBLIC INTEREST COALITION

Sent via email: cdraecs@placer.ca.gov jbyous@placer.ca.gov> sherring@placer.ca.gov

February 11, 2022

To: Placer County CDRA
Subj: Public Comment—NOP—Proposed Project 8 Winery

Thank you for the opportunity to comment on this most egregious proposal.

First, we incorporate by reference comments made during the Placer County Scoping meeting held at 1 pm on Tuesday, February 8, 2022. These would include but not be limited to: Not allowing variances as to Antelope Canal setbacks, solar disturbances over septic leach field compliance; consider another location—possibly next to a structure where height is over code limits in western Placer County's rural area near Hwy 65; and others.

Second, Placer County's Winery and Farm Breweries ordinance, 17.56330, states that the purpose of this section is to provide for the orderly development of wineries within agricultural zoning districts. Because this proposal is so incongruous with orderly development, one person asked how the project has come as far as it has. At what point does the County enforce compliance with its own ordinances and simply deny applications? Not only are taxpayer dollars wasted due to many hours of staff time spent on such an obvious incompatible proposed project in a "Rural Residential" or a "Residential Agricultural" zone, but also, neighbors and the public have to take personal time to point out how an unacceptable 75' high facility with a revolving floor is not orderly development and also violates County height ordinances. The EIR should examine how or why compliance with existing ordinances that have already been environmentally reviewed is being ignored, and how this project complies with the County's Ridgeline Protection policies.

Third, the parcel size of this winery is under 20 acres. Thus, according to Winery Ordinance Code (WO), the maximum number of attendees at one time is much lower than the applicants stated at one of the MAC meetings, and the maximum "Special Events/Year" is also much reduced from what is proposed. The WO appears to allow a larger facility with this statement under Table 2:

> An administrative review permit may be waived if a minimum of ten (10) contiguous acres is under the same ownership and deed restricted to preclude their separate sale, and if the structures related to the use meet the standards for the base zone district.

It is not clear that the applicants can utilize this "contiguous" acres work-around because it is in reference to a different section. However, assuming they can use it to comply with the ordinance, then please make public the language of the deed restriction and provide proof that it was recorded and that it is in perpetuity.

If the contiguous acres work-around is not meant to apply to the number of attendees (different section), then the project must not be allowed to have any of the larger number of events nor the larger number of attendees.

P.O. Box 671 Loomis, CA 95650 Public-Interest@live.com

Fourth: Since the state of California allows wineries to serve beer, more information needs to be revealed as to the serving of beer at this proposed winery and how it will impact traffic, air quality, hours of operation, etc.

Thank you for considering our views,

Marilyn Jasper, Chair
Public Interest Coalition
P.O. Box 671
Loomis, CA 95650
Public-Interest@live.com

Shirlee Herrington

From: Ann Henderickson-Pantos <rustyartgal@gmail.com>
Sent: Monday, January 24, 2022 9:46 AM
To: Shirlee Herrington
Subject: [EXTERNAL] Project 8

Good morning Ms. Herrington,

I am writing regarding the Project 8 winery. I am a local resident. In reading about the project, I was unsure if the public was able to utilize the restaurant and tasting room. I plan to attend the meeting and I am looking to clarify some of the items in the proposal. I'm sure I will have other questions as I read further . . .

Thank you!

Ann Henderickson
1497 Sisley Rd, Penryn,

Shirlee Herrington

Subject: FW: [EXTERNAL] Re: question Project 8

From: Ann Henderickson-Pantos <rustyartgal@gmail.com>
Sent: Saturday, February 5, 2022 12:36 PM
To: Jennifer Byous <JByous@placer.ca.gov>
Subject: [EXTERNAL] Re: question Project 8

Hello again Ms. Byous,

I'm writing again to ask questions about Project 8. I am trying to figure out how the project benefits local folks. I'm wondering what a person can expect to pay for lunch/dinner after they arrive for their reservation. I also would like to know what the price for wine tasting will be. In Napa Valley it is not uncommon to pay $50 or more. Do you know if the winery is planning to be an organic grower? I called a high-end winery in Napa Valley and I was informed that none of the wineries in the Napa valley have a tower for their gravity-flow filtration of wine, it is all accomplished underground. I was also informed that gravity-flow filtration was not common there.

Thanks again for your time,

Ann Henderickson

On Wed, Jan 26, 2022 at 5:53 PM Ann Henderickson-Pantos <rustyartgal@gmail.com> wrote:

> Hello Jennifer Boyus,
>
> I am a neighbor of the Project 8 winery construction. As a neighbor, I was wondering if Project 8 is welcoming the locals to patronize the new restaurant and tasting room. It was a bit unclear when I was reading the project description. I'm sure I will have other questions as I read on but it's a lot to digest at once . . .
>
> Thank you for your time!
>
> Ann Henderickson

EIR Scoping Meeting on the Project 8 Winery Project:

Placer County CEQA Decision makers:

Following are my concerns related to the proposed Project 8 Winery:

First of all, I will address the appearance of the project in relation to the community look and feel. The building, while beautifully designed, looks as if it would be more at home in an industrial park. Penryn is a quiet burg where folks enjoy the peaceful country life. There was an article in the Sacramento Bee last year on April 9th titled, "Penryn has slower pace, open air" and also stated "Quaint streets and landscapes really give the feel of a far-off small town". In my opinion, the look and scope of the project is too contrary to the way of life the people of Penryn expect. Scale back the size, and design buildings that fit with the country casual vibe here. Additionally, Guard shacks don't belong in Penryn, it sends the wrong message about our community. At the last MAC meeting I went to, the office stood up and gave the crime report: there was a fist fight at the Valencia Club and 2 Mountain Dews were stolen from the Fast Pak.

Next, I would like to address the variance that is being requested for gravity flow filtration of their high-end wine. Project 8 hopes to build a tower 75 feet tall plus more footage on top for mechanical equipment covered with tents, (by the look of the rendering). That is over double the maximum allowable building height which is 36 feet. The total drop for gravity filtration would be approximately 160 feet so the additional footage must be underground. They say the 75-foot tower is required for gravity filtering their fine wine. This is not true. I spoke with a winemaker from Caymus Winery in Napa Valley about gravity wine filtration. He said there are some wineries in Napa Valley that filter their wine by gravity flow however there are no towers, all the footage is located underground. Additionally, mechanical filters are able to filter high-end wine and they are the go-to way to filter wine in Napa Valley. Therefore, there is absolutely no need for the variance and it should be denied. The beauty of the tree-lined ridge would be interrupted forever.

Grapes are typically a heavily sprayed crop. I worry about the pesticides and herbicides traveling to nearby neighbors and to adjacent woodlands where wildlife live, not to mention being carried down the storm drain that empties at Callison Rd. Will Project 8 be practicing organic farming? I hope so.

On the subject of wildlife, I don't remember seeing anything about degradation or loss of habitat and the identification of any listed Federal and/or State threatened, endangered, or special-status species protected by both the Endangered Species Act and the California Endangered Species Act (CESA). A recent EIR prepared in Placer County based queries of CDFW's Natural Diversity Database (CNDDB) indicated there are as many as 23 special-status wildlife species and 19 special-status plant species that occur within the Rocklin and surrounding eight quadrangles.

Further, there are at least 4 migratory birds of concern known to occur in the proposed action area. There was no mention of migratory birds. The Migratory Bird Treaty Act (MBTA), although a federal law, makes it a federal crime to “take’ birds or bird parts, including feathers, eggs, or nests without special permission from the U.S. Secretary of the Interior. Impacts to migratory birds can occur from noise, loss and degradation of habitat due to development, poisoning, collision from human structures, lighting and reflection of and into glass.

Another concern of mine is that water is scarce these days, is it fair that we are all being asked to conserve water when large projects like this are being okayed? I have read of the measures being taken by Project 8 to conserve water but it’s not enough and is it wise to OK a project of this magnitude in the middle of years of drought?

The scope of this project brings too much traffic and too many people. Addressing air quality as a result of increased traffic, it is important to acknowledge that Placer County is out of attainment for PM-2.5 and 8-HR ozone. There are over 100 parking stalls planned and that is the minimum so the plan states. I would be against any requests that would allow more visitors. Callison Rd. is purported to be widened from 22 feet 32 feet along the winery area. Vehicles already race from Taylor Rd. turning on to Callison Rd. It is a real danger to pedestrians (I was almost hit there). A wider road would encourage faster speeds. The entrance belongs on Taylor Rd. And, no we don’t need sidewalks and another stop light, I hear from folks all the time complaining about the light at Taylor and Penryn roads, that they have long waits when nary a vehicle is around.

I understand that there will be a sculpture in the front of the project. I hope consideration will be given to commission a local artist. A good candidate would be Phil Evans. He is a metal sculptor that is highly regarded and he has completed many public pieces. There are many other excellent sculptors in the area as well.

Has the project owner thought of constructing a walking path on the property? It would be a nice gesture to provide a walking path and picnic tables under the oaks for local folks to enjoy. This could be a way of offering an olive branch to the community.

In closing, why is this project needed and how will it serve the private individuals and citizens living in the community? How will this project affect future growth here? Deep thought, planning and research are required because Project 8 will change the face of our beloved town forever. What is more important, catering to one person or saving our way of life for a whole community?

Ann Henderickson-Pantos

Colonel Christopher Pantos, USAF ret. 1497 Sisley Rd. Penryn

Carol Brock

1230 Honker Pond Court Penryn, CA 95663

Tel: Home Phone (916) 663-9725 Mobile Phone (916) 531-2752 cb42@aol.com

1/26/22

Shirlee Herrington
Environmental Coordination Services
Placer Count Community Development Resource Agency
3091 County Center Drive, St 190
Auburn, CA 95603

Placer County Development Resource Agency;

I am writing in response to the Notice of Preparation of an Environmental Impact Report for the Proposed Project 8 Winery. I am a homeowner in the impact area with several major concerns.

1.The project site is located in an area designated as "agricultural-related uses" in unincorporated Placer County. The proposed winery is an industrial /retail use - not agricultural. Therefore should it even be considered for approval?

2. Ground water and well contamination. Acres of grapes have already been planted during a period of high drought. Was there ever an environmental report done on the impact the huge well put in might have on the wells of the local home owners? What recourse do we, local homeowners in the area of the Project 8 Winery, have if our wells now run dry due to this high production winery well? Was an environmental report done on the potential ground water contamination due to chemicals used on the grapes? What recourse will the homeowners have?

3. Pollution and safety from traffic. Callison Road is a small, rural road that has not had much traffic until the Project 8 Winery began its development nearly two years ago (prior to environmental reports done?). The proposal is requesting that a maximum of 200 people at one time can attend a special event at that the facility, and that the project can have 208 special events annually. That means 57% of the year local homeowners would have to worry about their safety when driving and walking on Callison between the hours of operation, up to 10 p. m. at

night. That means 100 more cars on a now quiet rural road with possibly inebriated drivers coming from wine tasting and the restaurant/ special events. What safety measures will be taken to protect Penryn citizens walking in the area of the winery project? Sidewalks? Can the entry to the winery not be off of Taylor Road to save the rural integrity of the area? (Reference Placer County General Plan Visual and Science Resources Policy 1.K.1)

4. Erosion and drainage issues. I reference the Placer County General Plan Visual and Scenic Resources Policy 1,K.4, Policy 1.K.6, and Open Space for the Preservation of Natural Resources Policy 6,E.2)

There is a large pond on my property registered with the State Water Resource Board designated as a 'fire pond' located on Placer County Parcel Map 75424. Per the agreement, "said fire pond is for the purposes of fire suppression"and has a Placer County public fire hydrant on it.

(This pond is a tributary to Red Ravine thence Secret Ravine thence Miners Ravine thence Dry Creek thence Natomas Main Drainage Canal thence the Sacramento River.) The water that enters this pond enters dozens of other ponds on its way to the Sacramento River.

During the the 28 years of my ownership I have maintained the pond to support the 'fire pond' description, maintaining the water level and depth as well as keeping the water free of debris and weeds, being careful to always support the fish/wildlife population that lives in the pond. Never once has the water become less than clear nor filled with mud.

During the storm last fall on October 24-25, went approximately 24-30" above its normal level. When the water receded, the decks and stairs going to the pond, covered by the deluge, were covered in mud. The pond continued to look like liquid mud four weeks after the storm. When it rained again after that the pond once again looked like liquid mud. Turtles live in the pond and when they came out to bathe in the sun they were totally covered with mud. We still cannot determine if any fish continue to live in the pond due to the silt filled water from the decomposed granite assault on it. We assume the pond is considerably shallower due to all of the dirt that has poured into it.

I am enclosing photos of the pond representative of the 28 years I have lived here - and then from and since the weekend of the storm.

In trying to determine why so much dirt upstream washed into the pond from us - something that had never occurred before during the 28 years I have owned this property and pond, when hiking up the hills where the water flows from, we found a great deal of earth moved by the Penryn Winery and Hilltop Restaurant proposed developer. There is evidence of rain caused gullies and ditches, pipes ready to put in but not yet done so, etc. I am also enclosing photos of what we found there. It seemed obvious that the damage done to our pond with liquified granite mud has been due to the movement of dirt on the acreage of this development and lack of prevention taken.

It seems obvious that this new development did not incorporate sound soil conservation practices and minimize land alteration. Thousands of yards of dirt have been graded, moved and added to. It does not appear that cuts and fills have been limited nor graded areas replanted to ensure establishment of plant cover before the rainy season, (Policy 1.K.4) Per policy 1.K.6, developments near or on portions of hillsides are not to cause or worsen natural hazards such as erosion, sedimentation or water quality concerns. Erosion and sediment control measures [should be included] with temporary vegetation sufficient to stabilize the disturbed areas.

What mediations can we expect 'after the fact' of the above failures to follow the General Plan? We now sit with a shallower fire pond on our property, full of new weeds as well as sediment. This can impact the amount of water now available to use to fight local fires.. This can also have an impact on the value of my property. Does the developer not bear any responsibility for protecting the water rights of those of us and wildlife downstream of his development as well as the property values of surrounding homes?

If not already done, I would strongly recommend the Planning Commission members take a tour of the development, independent of wining and dining offered by the developer. Please take an unbiased look at the agricultural rural lifestyle the homeowners have chosen and would like to protect.

Sincerely,

Carol Brock

1230 Honker Pond Court, Penryn 95663



pond taken 11/19



pond taken 11/21





pond taken 7/21



pond taken 11/21









photos taken 11/4/22 from development property





phots taken 1/28/22 - culvert bringing in water
and weeds now growing in water

Project 8 Winery

RECEIVED
FEB 10 2022
CDRA - Planning

Feb 2, 2022

Greetings Shirlee Herrington,

My name is Lindsay Markin and a 25-year resident on the corner of Callison Rd and Ridgeview. The Winery is the best thing that could have happened to us. Mike is extremely accommodating and conscious of all the surrounding neighbors. His plans and vision are big and going to be successful. Change is inevitable and I have to admit our little valley has experienced very little over the years. All the work I have witnessed regarding this project has been professional, up to code and not cutting any corners. In fact he has fixed many water problems that has plagued us for many years. When I first met Mike his motto was 'He wants to be a good neighbor' a year later he has backed that up 10 fold with his actions. He has shown a willingness to work with everyone and listen to the needs and wants of the neighborhood. The value of all our homes will only benefit from a world renown winery. I am also in favor of the building on top of the ridge. Tasting room, restaurant, research lab, will draw an elite clientele.

Sincerely,

Lindsay Markin

Lindsay Markin
7411 Callison Road
Penryn, Ca 95663

Ridgeline Protection



Various Placer County planning documents including the County General Plan and Rural Design Guidelines address ridgeline protection, both containing goals, policies and implementation strategies or measures. The **Placer County General Plan** establishes policies and programs that regulate ridgeline development and alterations including:

Residential Land Use Policy 1.B.5
The County shall require residential project design to reflect and consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by General Plan designations or zoning for a given parcel of land may not be realized.

Visual and Scenic Resources Policy 1.K.1
The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:

a. Avoids locating structures along ridgelines and steep slopes;
b. Incorporates design and screening measures to minimize the visibility of structures and graded areas; and,
c. Maintains the character and visual quality of the area.

Visual and Scenic Resources Policy 1.K.2
The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.

Visual and Scenic Resources Policy 1.K.3
The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

Visual and Scenic Resources Policy 1.K.4
The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;
d. Replant graded areas to ensure establishment of plant cover before the next rainy season;
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development; and,

f. Provide and maintain site-specific construction Best Management Practices (BMPs).

Visual and Scenic Resources Policy 1.K.6
The County shall require that new development on hillsides employ design, construction, and maintenance techniques that:

a. Ensure that development near or on portions of hillsides do not cause or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns;
b. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas;
c. Minimize risk to life and property from slope failure, landslides, and flooding; and,
d. Maintain the character and visual quality of the hillside.

Scenic Routes Policy 1.L.3
The County shall protect and enhance scenic corridors through such means as design review, sign control, undergrounding utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements and land conservation contracts.

Development Form and Design Policy 1.O.3
The County shall require that all new development be designed to be compatible with the scale and character of the areas. Structures, especially those outside of village, urban, and commercial centers, should be designed and located so that:

a. They do not silhouette against the sky above ridgelines or hilltops;
b. Roof lines and vertical architectural features blend with and do not detract from the natural background or ridge outline;
c. They fit the natural terrain; and,
d. They utilize building materials, colors, and textures that blend with the natural landscape (e.g. avoid high contrasts).

Development Form and Design Policy 1.O.4
The County shall require that new rural and suburban development be designed to preserve and maintain the rural character and quality of the County.

Vegetation Policy 6.D.1
The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

Vegetation Policy 6.D.9
The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.

Open Space for the Preservation of Natural Resources Policy 6.E.2
The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:

a. High erosion hazard areas;
b. Scenic and trail corridors;
c. Streams, streamside vegetation;
d. Wetlands;
e. Significant stands of vegetation;
f. Wildlife corridors; and,

g. Any areas of special ecological significance

Placer County Rural Design Guidelines, 1997.
Several sections of the Rural Design Guidelines deal with conservation of the natural landscape including:

Greenbelts, Open Spaces, Native Vegetation, Habitat and Wildlife Protection Goal 5
Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, should be an overriding consideration in the design of any project, paying particular attention to its protection and the preservation of existing native vegetation.

Lot Design- Goal 2
To assist in designing home locations on lots to preserve the local rural character.

Lot Design- Implementation Technique 5
Buildable portions of lots should be designed to protect natural resources/features by incorporating trees, wetlands, streams, rock outcroppings, etc. into the overall project for long term preservation. It is not always necessary to completely avoid these resources, they can often be incorporated into a project design. Residences should be located on the edges of topographical changes and vegetation areas (i.e. wooded areas), or just below ridge lines.

Preservation of Scenic Areas Goal 1
To avoid creating predominant landmarks which impose on the rural landscape and the natural skyline in ways that cause the contiguous rural landscape to be interrupted.

Preservation of Scenic Areas Implementation Techniques

1. Homes and accessory structures should blend into the environment.
2. Where possible, structures should be tucked along tree lines or along other topographical changes in contour.
3. On lots located along ridge tops, houses and accessory structures should be built just below the ridge line where there are no existing trees to prevent the structures from becoming the predominant feature on the rural landscape. Otherwise, such development should be screened by new plantings of sufficient height and bulk at maturity to minimize visual encroachment to the greatest extent possible.

Protection Measures

Steep slope regulations are frequently based on environmental considerations such as erosion and sedimentation controls, while ridgeline regulations have more emphasis on view protection. County policy stipulates that development should not take place in such a way as to create major or lasting visible scars on the landscape or a major negative visual impact. The County seeks to accomplish the following:

1. Provide hillside development standards to minimize the impact of man-made structures and grading on views of existing landforms, unique geologic features, existing landscape features and open space as seen from designated public roads;
2. Protect and preserve views of major and minor ridgelines from designated public roads and recreational areas;
3. Minimize cut and fill, earthmoving, grading operations and other such man-made effects on the natural terrain to ensure that finished slopes are compatible with existing land character; and,
4. Promote architecture and designs that are compatible with hillside terrain and minimize visual impacts.

Shirlee Herrington

From: pneifer <pneifer@gmail.com>
Sent: Thursday, February 10, 2022 6:24 PM
To: Shirlee Herrington
Subject: RE: [EXTERNAL] Email address for public comments on Project 8 Winery

Please include these comments on the NOP for the Project 8 Winery.

The bridge walkway over the PCWA water canal and antelope creek should be evaluated for environmental impact. Can the canal walls support a bridge? Can things be thrown into the water from the bridge?

The proximity to the rail road and tracks with a building design to tower above the train and tracks should be evaluate.

The amount of underground excavation and digging, rock removal and tunneling into granite and earth should be evaluated for environmental impact, including erosion, water contamination and safety of patrons for emergency evacuation.

Another environmental impact would include the loss of water seeping into the groundwater with this much of the earth covered with roads, buildings, parking and other structures.

Patty Neifer
Penryn resident
Pneifer@gmail.com
916 934-9050

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: Shirlee Herrington <SHerring@placer.ca.gov>
Date: 2/8/22 8:25 AM (GMT-08:00)
To: pneifer <pneifer@gmail.com>
Subject: RE: [EXTERNAL] Email address for public comments on Project 8 Winery plus ridgeline document

CDRAECS or my email both work. I've forwarded your request to have the document projected. They will let you know at the meeting if it's possible.

Thank you,

Placer County Environmental Coordination Services

From: pneifer <pneifer@gmail.com>
Sent: Saturday, February 5, 2022 4:44 PM
To: Placer County Environmental Coordination Services
Subject: [EXTERNAL] Public comment from Patty Neifer Project 8 Winery NOP

This concern regarding the EIR of the Project 8 Winery is based on the undetermined maximum public capacity of the project area.

While the winery ordinance defines a maximum capacity for tasting rooms and for special events at a winery, there is no capacity limit on the number of visitors to the winery at any given time. This fact would make the EIR inaccurate.

In the case of an auxiliary restaurant and Project 8 auxiliary public spaces, there is not a maximum capacity defined. In addition to the guests dining inside the restaurant in a facility of this size, there will likely also be overlapping public visitors to the gift shop, wine store, wine caves and viewing areas. Guests will be taking advantage of the expansive hilltop terrace, sightseeing from the rooftop observation area, participating in wine cave tours, using the two large meeting rooms and taking walks in the vinyard and along the designated paths.

Since reservations are not required and public guests accessing the winery are not limited, agriculture tours, wine club members, and other activities offered at the winery will attract an undetermined number of visitors.

Since there is no defined maximum occupancy capacity, how can the environmental impact study accurately identify the impacts of this project?

The addition of a 3600 square foot outside dining and observations area, together with the size of the restaurant and the separate rooftop wine tasting area and conference rooms add up to over 10,000 sq foot of public use area.

My comment is that before an EIR can be done, the capacity of traffic and guests must be identified and defined. What process is being used to calculate public usage for the purpose of the EIR.

Patty Neifer
916 934-9050
Penryn resident
Pneifer@gmail.com

Shirlee Herrington

From: Heidi Storm <heidimstorm@gmail.com>
Sent: Sunday, February 6, 2022 2:21 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Winery tower in Penryn

Hello Sherry,
I am not in favor of the new construction planned for the winery on Callison Road. The neighborhood out here is so peaceful and quiet, it would be ruined by having the volume of tourists that would come to a 72 parking-spot facility. The roads are not wide enough in the neighborhood and Callison Road itself is already dangerous for bikers and walkers as it has no shoulders. Outsiders driving in would add to the danger, especially as they leave tanked up on wine. The winery is already taking up more than its share of PCWA water and that concerns us all for the future. I think even worse than having a winery is the monstrosity of the structure that is planned. It would completely damage the image of our rolling hills and pastures region.
Thank you for asking for our opinions.

Confidentially,
Heidi Storm

Shirlee Herrington

From: lisa clingan <skylalisa@yahoo.com>
Sent: Sunday, February 6, 2022 9:15 AM
To: Shirlee Herrington
Subject: [EXTERNAL] Oppose Winery

Good morning Shirlee,

I am emailing to oppose this winery. We are life long, third generation Newcastle residents. We live off of Taylor rd. Our roads cannot accommodate a huge winery such as this. Newcastle residents also do not want to commercialize our area. It is incredibly upsetting that our local Government is not trying to preserve these small towns. We live here because we don't want all the traffic and the people. Thanks so much,

Lisa Clingan

Shirlee Herrington

From: Morgan Buttram <buttrammorgan@gmail.com>
Sent: Sunday, February 6, 2022 8:08 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Proposed Winery with 75ft restaurant

To Whom It May Concern,

My concerns with a 75 ft tall restaurant is that it will take all, if not most water resources that many local farmers orchards and cattle ranchers and farmers (including my home) surrounding area of Penryn will be limited. Being that California has been in a drought the past several years, a giant winery that will take up the local water supply does not seem appropriate. Secondly, I'm most concerned with pesticides that will be used on the wine grapes as it goes into the soil and will run down any creeks as well as, penetrate deep in the water supply in the surrounding areas (including my property), will be ingested by people and animals. Lastly, a 75ft tall restaurant is a absurd and invasion of local homes privacy. Whomever this builder/owner of this proposed winery and restaurant may be, they are excavating and demolishing the beautiful rolling hills and nature preserves that was once a residence of native Americans.

I hope my concerns will help mediate a decision of good merit.

Best,

Local of Newcastle.

Shirlee Herrington

From: Sara Stephens <sarastephens313@hotmail.com>
Sent: Sunday, February 6, 2022 5:53 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Public Comment: Project 8 Winery Loomis/Penryn

Dear Sherri,
My name is Sara Mattia and my family and I have lived in the Loomis/Penryn area for 15 years and my father had a business in Loomis for 20+ years. We have been involved in our community for over 20 years. I volunteer extensively with 4-H, FFA, the Placer/Nevada Cattlewoman's Association, my children's schools and do what I can to support the youth in our community. I have been watching this winery and development project go in on a daily as I drive my kids to school along Taylor Rd. This development project is NOT in the care and keeping of the rural community I care about and love. Though the grape vines do support agriculture in the community, an aerial restaurant on the top of the hill which could potentially accommodate parking of 75+ spots are not what the roadways, the traffic, the noise ordinances and the residential area should accommodate. I do support a small restaurant that doesn't not stand like an eyesore on the hill.

I am unable to attend the Zoom meeting due to work commitments, but I would like my opposition to this project, as it currently stands, acknowledged in the public comments, please. If there are modifications to the project to scale it back to mesh more with the care and keeping of a rural community, I would be more in favor.

Thank you
sara mattia

EIR Scoping Meeting on the Project 8 Winery Project

Shirlee Herrington

From: Tim Onderko <loomisusa@gmail.com>
Sent: Sunday, February 6, 2022 9:48 AM
To: Shirlee Herrington
Subject: [EXTERNAL] Penryn Winery Project (PLN21-00198) EIR

Dear Shirlee, I'm writing to express my support for the proposed Penryn Winery, restaurant, tasting room and production facility Project, known as Project 8 Winery (PLN21-00198).

The proposed design and facility will provide a destination attraction to the area which will bring employment opportunities and tax revenue to Placer County.

My family and I are residents of Loomis. We look forward to visiting the new facility when it opens, should the project be approved.

We urge the planning commission to support the project as proposed including the requested structural height variance.

Sincerely,

Tim Onderko
Loomis, CA

Shirlee Herrington

From: Tish Walters <tish.walters@icloud.com>
Sent: Sunday, February 6, 2022 8:41 AM
To: Shirlee Herrington
Subject: [EXTERNAL] Penryn Restaurant/winery

We have a beautiful home on Penryn Road ! we are very against this gigantic restaurant. The winery is OK but this enormous 75 ft building with the restaurant rotating on top is absolutely ridiculous! we do not want it in our area. We don't mind the winery but we don't want the traffic on Callison and Taylor and we don't want to gigantic restaurant. The Walters 5308633080

Sent from my iPhone

Shirlee Herrington

From: Doug Diruscio <doug.diruscio@yahoo.com>
Sent: Monday, February 7, 2022 4:34 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Project 8 Winery
Attachments: build site.jpeg

Planning Commission,

My property is surrounded on 3 sides by the project 8 vineyards and I feel that the proposed restaurant, events center, and processing facility will have a profoundly negative impact on the rural environment I currently enjoy. The request to build a 75 foot heigh, equivalent to a 6 story building, on the top of an undeveloped hill in rural placer county should not be granted. Such a request would spurn deliberation and trepidation in the developed cities of Roseville and Rocklin, but is totally out of place in our rural countryside. Please see the attached photo taken from my property towards the proposed build site (You can see a scissor lift on-top of the hill).

The requested variance actually exceeds 75 feet as it does not include the height of "rooftop mechanical equipment" that will make the building even larger. The other requested variance is to expand the occupancy limit from 50 to 75, as one of the closest neighbors I am concerned about the noise generated from 75 people drinking wine 6 stories high as they overlook my property. I ask that neither the height or the occupancy variance be granted for this winery and that the project work within the confines of the already generous Placer County wine ordinance that was recently updated after extensive review.

I welcome a winery under 30 feet high with a maximum occupancy of 50 people at the building site. Please do not grant these variances as they will create a negative noise and visual environment for a rural community. When I purchased my property the neighboring land was protected by the Williamson Act to ensure its rural composure, please don't allow it to become a wine entertainment park.

Regards,

Doug DiRuscio
871 Peach Tree Lane
Penryn, CA 95663



Comments on the Notice of Preparation of an Environmental Impact Report for the proposed Project 8 Winery in Penryn

From:
Gabriele Windgasse, DrPH
3570 N Lakeshore Blvd
Loomis, CA95650

Date: February 7, 2022

Dear Planning Commission members,

I am a member of the Horseshoe Bar/Penryn MAC and have several questions and concerns regarding the proposed Project 8 Winery in Penryn. In my opinion, the project as proposed is an unreasonable impairment of the natural resources of the Horseshoe Bar/Penryn area and would constitute a significant irreversible impact. The predominant structure is more than 75 ft tall and is incongruent with the surroundings and the ridgeline. The project would create a predominant landmark which imposes on the landscape and natural skyline. A beautiful winery with an excellent accessory restaurant, event space, and wonderful views can be accomplished on that site with a different design.

Specific comments on scope and content of EIR.

1. The NoP does not specifcy how tall the overall structure is: in addition to the 75 ft of the building's height above grade – what height is added by the mechanical equipment and the screen? This overall height of building and screen should be used when the county is considering granting a height variance above the maximum allowable building height of 36 ft.

2. Should the octagon be considered an „agricultural structure“ since levels 1, 2, 3, and 4 are not primarily agricultural? Only the sublevel and the top level are related to ag use.

3. Does the overall height of building and screen require warning features for aviation safety (i.e. blinking lights at night etc)? There are several small local airports nearby that could be affected.

4. As part of the EIR, please provide a map of the viewshed from the tallest point of the octagon/screen: from which points is this structure visible? Which major roadways, parks, trails, towns are affected from changing the ridgeline with a permanent landmark like this?

5. The proposed parking stalls are given as minima (minimum of 72, 19 and 27, for octagon top, warehouse, and wine cave, respectively - total of 118) – what are the maximum parking stalls that can be installed?

6. The sub-level structures range from 20 ft below grade (octagon, 8000 sf) to 90 ft below grade (wine cave, 32,000 sf), in addition to the vertical shaft to the top of the hill and horizontal tunnels. How much volume will be removed from the inside of the hill? Where will the massive volumes of excavated material be placed? Do the excavated materials contain potentially hazardous materials (for example arsenic compounds) and how would dust emissions and leachate be managed during construction and operation? What potential impact could the excavation have on quality of

groundwater, surface water, and drinking water of the area, including the public and private wells on the site? Will the excavation cause the water level to change?

7. Aestetics:
    a. Please consider in this section of the EIR how this project may look 20 or 50 years from now. I would assume that the restaurant stopped revolving, and the then-owner may either be unable or unwilling to invest sufficiently in the required upkeep. The structure may be too expensive to repair or tear down, and it may deteriorate into an eyesore, a very visible ruin on a hilltop.
    b. Please discuss how approval for this project can set a precedent for future ridge top developments: for example residences, hotels, restaurants , condominiums on other ridgelines.
    c. What lights are proposed for all structures, roads and landcaping? How far would these lights be visible at night?

8. Agriculture and Forestry Resources:
    a. How many trees (type, age) would need to be cut down for this project as proposed?

9. Landuse and Planning
   Please request that the applicant follow the established guidance, for this site, including:
    a. The Horseshoe Bar/Penryn Community Plan (https://www.placer.ca.gov/3033/Horseshoe-Bar-Penryn-Community-Plan#:~:text=The%20Horseshoe%20Bar%2FPenryn%20Community,at%20least%20the%20year%202010) amendedin 2005, pages 115-116, specifically speaks to the importance of natural landforms, vistas, viewsheds, and maximizing the preservation of natural beauty.

       „Because the dominant features of the Planning Area contributing to the open quality are the natural landforms and vegetation, structures should be subordinate thereto. .... The scale of building, the siting of structures, and the design and materials of construction shall be harmonious with the natural setting so that the visual quality of open spaces will not be unreasonably impaired."
       „A variety of vistas shall be provided and preserved ranging from the small enclosed private views to the more distant views shared by the community. The viewsheds of 1-80, AuburnFolsom Road, King Road, Indian Hill Road, Clark Tunnel Road and Perryn- Taylor Road shall be protected to preserve existing scenic vistas of the Sacramento Valley, Loomis Basin Foothills, high peaks of the Sierra Nevada, and Folsom Lake."
       „Require development of all building sites and residences in a manner minimizing disturbance to natural terrain and vegetation, and maximizing preservation of natural beauty and open space."

    b. The Placer County Rural-Design Guidelines https://www.placer.ca.gov/DocumentCenter/View/10134/Rural-Design-Guidelines-PDF places the natural landscape as the dominant feature. *„Structures that dominate the landscape interrupt the rutral continuity of the area*". The specific goals are: *„1) to avoid*

creating predominant landmarks which impose on the landscape and the natural skyline in ways that cause the contiguous rural landscape to be interrupted; ... 2) To protect ... public view corridors along ...Interstate 80 from actions which degrade their scenic quality".

c. The Placer County Design Guidelines Manual (https://www.placer.ca.gov/DocumentCenter/View/3828/Placer-County-Design-Guidelines-Manual-PDF), page 101 spells out the special district guidelines for Penryn, including: *„maximum height shall not exceed two (2) stories, low silhouette, low profile. ... Structures should be built just below the ridgeline, to prevent the structure from becoming the predominant feature on the rural landscape.... Ensuring that structures do not emerge above the treetops*"

Summary

I am greatly concerned that approving the Project 8 Winery as proposed will set a precedent for future ridgeline or other developments in Placer County. This project - as proposed - significantly impacts the common good of open space, vistas, and the natural beauty of the area. These concepts are defined and protected in many Placer County Guidelines.

I urge the Planning Commission to request changes that align this project with existing guidelines. A beautiful winery with an excellent accessory restaurant, event space, and great views can be accomplished on that site – it does not require a 75ft+ structure that is – or could become - an eyesore for many Placer County residents and visitors.

Thank you for your consideration.

Please let me know if you have any questions.

Sincerely

Gabriele Windgasse, DrPH
windgasse@hotmail.com
c 916.316 3726

Shirlee Herrington

From: Pierre Marchal <gpmarchal@sbcglobal.net>
Sent: Monday, February 7, 2022 7:29 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Winery in Penryn

I do not oppose the winery concept. I do oppose the height of the structure. It is noted as 75' PLUS mechanical equipment with screening. What's the total. It says the commercial structure contains a residence. Perhaps if that was not part of the structure it could be lower. After all, it is already on a hilltop. The next concern are the parking lots, noted with a minimum number of stalls. What is the maximum? What happens to the contaminated runoff from these parking areas. How is the sewage from this property handled. The downtown area of Penryn was required to have a sewer system installed because the local soils could not filter sewage properly and well water was contaminated. With an increase of numbers of people, restaurant, and everything else, it is a concern. I would like to close by acknowledging that we the local population actually have no say and no recourse if the four supervisors we can not vote for or against choose to ignores us. Remember, money talks.

G Pierre Marchal
Penryn, CA
916-316-3145

Shirlee Herrington

From: Ryan Fogarty <rfogarty13@gmail.com>
Sent: Monday, February 7, 2022 3:00 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Project 8 Winery Comments

Hi Shirlee,

Thank you for taking comments here.

My two primary concerns around the winery are:

1) The visual impact on the generally natural landscape in our home, Penryn/Newcastle. It is ironic that the very reason they want to build a 75ft restaurant/observation deck is to be able to see the beautiful area/land that is beautiful because it has no 75ft towers/buildings. Why on earth would we allow this to happen for the benefit and greed of one family? The winery owners are showy people who do not share the same values of modesty, nature, environmental respect that make our towns great (Just look at their house off of Sierra College). Let's not let them ruin the area -- we are already under assault from developers, left and right (literally).

2) The impact on water usage in the area. Water is already a scarce resource and with weather patterns the way they are, it doesn't appear that this will change any time soon. Between this and the Bickford Ranch project, water has become a huge concern.

Ryan Fogarty
Penryn

Placer County Environmental Coordination Services

From: Cathy Chappell <chappell.cathy@gmail.com>
Sent: Tuesday, February 8, 2022 2:40 PM
To: Placer County Environmental Coordination Services
Subject: [EXTERNAL] Proposed Project 8 Winery EIR preparation

in the EIR please address the following:

- ground water quality and quantity impacts
- air quality impacts
- loss of wildlife habitat
- increased traffic and road use impact and safety
- aesthetic impacts including
    - 75' height variance for the ridgeline octagon building especially given county restrictions on ridgeline construction
    - massive wall at entrance and guard shack, not in keeping with the neighborhood
- culture issues including appropriateness of
    - a large commercial facility in a rural residential/agricultural area.
    - a full service "accessory" restaurant in a residential neighborhood

I am concerned about this project on many levels, including the owner's continued development of the property prior to the EIR and the many irregularities of variances and encroachment he has already successfully negotiated.

In particular I am opposed to the 75' height variance, on the ridgeline/hilltop. In the EIR, alternatives should be considered including no building, or a limited building for wine production only restricted at the allowed 36', relocating the wine production and associated buildings to the owner's Taylor Road parcel.

I am opposed to the extended hours of the "accessory" restaurant and the variance for increased capacity. The EIR should address the apparent disconnect between the restaurant's hours of operation and typical winery tasting room hours. It appears that the tail is wagging the dog in this arrangement. In the EIR, alternatives should be considered including no restaurant, locating the restaurant on the owner's Taylor Road parcel, and/or significantly restricted hours of operation.

This invasive, large commercial operation is not appropriate for the rural residential and agricultural make up of Callison Rd.

Thank you in advance for addressing these issues.
Catherine Chappell
7276 Callison Rd.
Penryn, CA 95663

Placer County Environmental Coordination Services

From: Steve Fettke <stevefettke@hotmail.com>
Sent: Tuesday, February 8, 2022 7:10 PM
To: Placer County Environmental Coordination Services
Cc: Steve Fettke
Subject: [EXTERNAL] Project 8 Winery Comment

I think most aspects of the winery look good.

But the 75-foot-tall octagonal restaurant is obtrusive and out of place. It will be too visible from surrounding areas, dominating the sightlines. And will loom over close neighbors, impacting their privacy. I don't think it needs to be that tall to have good views anyway and should stay within the allowed maximum heigh above grade.

My other concern is the large parking lot uphill of the restaurant. It seems too big for that location. A lot of oak trees would need to be removed. And a lot of grading would need to be done. It seems like there should be a less impactful place on the property to put a parking lot.

Steve Fettke
Unincorporated Loomis, CA

Shirlee Herrington

From: Jennie Nitta <jennieknitta@gmail.com>
Sent: Wednesday, February 9, 2022 11:46 AM
To: Shirlee Herrington
Subject: [EXTERNAL] Winery

We believe this project is extremely inappropriate for our neighborhood. A 75' tall rotating restaurant on top o
over 100 people? The volume of traffic? Noise? Pollution?

It is a very large,busy commercial project in a very quiet residential/agricultural area.

We are especially concerned about the following-

Digging tunnels three stories down deep into the ridge and drilling through granite for the underground meeting rooms and public a

Everyone in the area gets their drinking water from wells. How will this affect the groundwater.

Wildlife displacement

How much light pollution will this cause? What will our evening sky look like?

Congestion and pollution from additional traffic. Taylor Road already backs up through the area several times a day. This project w
the area as they travel through on the freeway. The intersection at Taylor and English Colony will need a traffic light to accommoda
Penryn exit. English Colony Road will be impacted as people try to access the winery from Lincoln and beyond. There is a one lan
tracks where English Colony Road crosses. The traffic on this road is already going to be severely impacted with the Bickford proje
way will use Clark Tunnel and the west part of Callison. Both roads are very narrow, with numerous blind spots on the hills and cur

Erosion and drainage issues.

Building a structure on top of the ridge is not typical in Placer County. Ridgeline protection specifications are in place, but not being

How will the PCWA ditch be protected from contamination?

We are fine with the winery but the scope and size of the event center and restaurant are beyond what is app

Thank you,
Mark and Jennie Nitta
Abbott Road
Penryn

Vitp}Jsv{ evh

Shirlee Herrington

From: Beth G. <sunflower_1102@hotmail.com>
Sent: Friday, February 11, 2022 1:22 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Penryn Winery Comments

Dear Planning Commissioners and Supervisors:

Please consider my concerns as a county resident of 45 years and owner of three acres in Penryn since 1978. The rural community atmosphere, with open fields, livestock. oak woodlands, friendliness of the residents, and winding roads are just a few of the pluses of living here. The planned incoming Penryn Winery will contribute to a demise of such valued features.

This is a **HUGE** development, not only in acreage, but height, with a **75'** restaurant tower (which is totally against Placer County's own ridge guidelines, as is the ridgetop location,) and depth, three stories deep for production facilities and underground meeting rooms. Present plans call for tunneling down into the ridge and drilling through the granite base rock, allowing water movement from the subterrain aquifers. Well users will face possible contamination. Will the company and/or County pay for new wells? Has the County required guarantees that any contamination mitigation be paid for in full by the Penryn Winery? Is the County committed to file suit for residents and pay for court costs?! What will the company do to prevent PCWA canal contamination, including run off? Drainage from the property and erosion from earth displacement must be strictly observed and requirements enforced. Once the development is built, will there be frequent, unannounced County inspections and evaluations to make sure rules are adhered to into the future?

The expected customers will be arriving via Taylor Road, a two-lane road that has already seen a substantial increase in residential and commuter traffic. Those vehicles bring with them air and noise pollution, degrading the environment. While on the subject of pollution, with this large ridgetop development, even with down facing lighting, there will be light released, effecting the night skies.

Finally, speaking on behalf of the voiceless, wildlife will have needed habitat forever removed by the buildings, patios, terraces, observation decks, hillside parking, landscaping, and walking paths proposed. The Bickford and Lincoln developments have already removed gigantic chunks of wildlife habitat.

The attraction of a fancy new winery, adding to Placer's desire to grow in their wine destination status, and the hoped-for taxes, can color supervisors' view of the actual cost of such a project. I urge you to require a much scaled down version of this proposed winery, eliminate underground drilling, the tower, and guarantee company mitigation of problems created. Please be aware of the trick of closing a company where the documents were signed, and opening a new one, free of past commitments and responsibilities!

Thank you for your careful consideration of my concerns.

Sincerely,

Beth A. Sunflower Gouveia

Beth A. Sunflower Gouveia
5165 Abbott Road
Penryn, CA 95663
916-663-9567
sunflower_1102@hotmail.com

Shirlee Herrington

From: Larry Gouveia <lxgc802@hotmail.com>
Sent: Friday, February 11, 2022 3:13 PM
To: Shirlee Herrington
Subject: [EXTERNAL] Project 8 Winery, Penryn

Good Afternoon,

My name is Larry Gouveia, I live at 5165 Abbott Rd, Penryn and I wish to voice my concerns about the size and scope of this project.

First, it is planned for a ridge top which goes against the Placer County Planning Commission guidelines.

It will add light, water and air pollution to this RURAL community.

Traffic will increase significantly to freeway and local roads which are already at capacity on weekends and commuter hours.

Creating wine caves and cellars into the hillside does not seem very eco friendly.

Water usage to grow grapes is using up an already precious resource.

What about winery patrons driving under the influence of alcohol. How many traffic accidents and possible fatalities are considered “acceptable”?

I’m not a teetotaler, I enjoy a good glass of wine. I just think there are enough wineries in California and around the world to keep everyone supplied.

Thank you.

Lawrence Gouveia

Sent from my iPhone

February 11, 2022

Shirlee I. Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603
sherring@placer.ca.gov

RE: Project 8 Winery NOP

Dear Ms. Herrington,

My husband and I attended the recent EIR Scoping Meeting on the Project 8 Winery Feb. 8, 2022. We appreciated the many comments of the citizens who were able to attend during the week at a time when many in our community are at work.

We have admired the new plantings of grapes along Taylor Road and Callison Road that enhance our communities agricultural setting. However, we do have concerns about the proposed developments on the 17.96 acres. We submit the following comments to help provide responsible agencies and interested persons with additional concerns regarding the scope of this project.

Traffic Circulation

While the document provided for the meeting discusses road improvements on Callison Road in front of the winery entrance it does not take into consideration the impacts of traffic on Sisley Road, Old English Colony or Callison Road where it connects to Old English Colony. These Roads, (Sisley Road and Callison Road) travel through the rural residential community. Community members run, bike, walk their dogs, ride horses, school age children will walk home from school on these roads during the winery's hours of operation. This presents a public safety concern. These roadways are narrow, have deep drainage ditches on the sides, blind curves, no center line and have no night lighting. Wine will be served at this facility which raises the concerns of DUI's and potential injuries to the community residents that live on these roads.

> A commercial development of the size and scope that is proposed would be better suited to have an entrance off of Taylor Road.

Further concern is Sisley Road from Taylor Road to Callison Road. Sisley Road is a historic section of the Lincoln Highway; and needs to be protected from excessive use. Sisley Road is the most direct route from the intersections of Rock Springs and Taylor Road to the Callison Road entrance of the Winery.

> Review of the historic status of Sisley Road and its potential protections and uses must be reviewed.

Accessory Use Restaurant

The proposed restaurant does not comply with the intended county guidelines. This proposed project would set a new precedent for development in Penryn beyond the intent and spirit of the Winery Ordinance Placer County established. The proposed full-service restaurant presents significant impacts to the present and reasonably foreseeable future of the developments in the Penryn community.

The Ridge Line

The architectural rendering of the proposed octagon building raising up 5 stories is deceptive. Clearly a number of trees will be removed, and the tower will be significantly exposed. We suggest that significant study be given to the requested height of the building. Having the building itself remain at the 36-foot level is acceptable, but not on the ridge line. The tower infringes on the ridge line policy of Placer County. Additionally, the upper levels of this facility would provide a view into the yards of the neighborhood evading personal privacy of residents. This raises the potential of a public nuisance violations.

Hours of Operation

Penryn is a rural residential community. The proposed facility operating from 7 A. M. to 10 P.M. introduces an intense commercial atmosphere to their neighborhood. The established county limits of 50 attendees at one time for Agricultural Promotional Events is acceptable. However, there is no limit to the number of events. The proposed projects plans on 208 events a year. A limit of the number of events must be considered should the Planning Commission approve the increase of attendees.

It should be recognized that increasing beyond this limit significantly increases traffic into the community unfamiliar with our roadways or considerate of the bucolic lifestyle of the community. Additional persons and cars will increase the noise level, affect air quality, increase pollution, increase need for potable water, and increased wastewater. These issues should be given considerable review in the determination of an increase from the limit the 50-attendee limit as well as the number of events.

Septic System and Bio Reactor System

The project proposes a Septic permit be obtained from Placer County Environmental Health Department. Separate and apart from the Septic System the project proposes a High Strength Membrane BioReactor system. BioReactor systems have greatly improved since first being introduced but there are still concerns of these systems potentially leaking into the ground affecting the quality of ground water and potentially creating a swampy area on neighboring parcels. A significant review of the BioReactor System and geological impacts must be given significant consideration.

Night Sky – Light Pollution

Lighting is an issue in the rural area. Residents enjoy the night sky. Any lighting must be downward and turned off after closing.

Napa Green Certified

What exactly is this certification? It appears to be a vintner trade group that shares information on sustainable development and land use. Clearly a trade group has its on priorities and those differ significantly from the surrounding community. Review the attached link.
https://www.northbaybusinessjournal.com/article/industry-news/napa-green-certification-whats-it-take-for-a-winery-or-vineyard-to-get-it/

Thank you for this opportunity to provide comments on this proposed project. We hope the planning department will review these issues and make the Project 8 Winery a project that can be enjoyed and supported by the community.

Sincerely,

Michael and Cheryl Schmit
7911 Logan Lane
Penryn, CA. 95663

Shirlee Herrington

From: Cheryl Berkema <cheryl.berkema@gmail.com>
Sent: Friday, February 11, 2022 4:54 PM
To: Shirlee Herrington
Cc: Cheryl Berkema
Subject: [EXTERNAL] Proposed Project 8 Winery Berkema feedback

Hello Shirlee,

Can you please forward my comments to the appropriate individuals?

Subject: Notice of Preparation of an Environmental Impact Report for the Proposed Project 8 Winery

The proposed project would require the approval of a Conditional Use Permit (CUP) for the construction and operation of a Large Winery on 40+ acres, the operation of an accessory restaurant, and to allow an increase from 50 to 75 maximum attendees (at one time) for Agricultural Promotional Events; as well as a Variance to allow the octagon building to reach a height of 75 feet from the finished grade (plus rooftop mechanical equipment that will be screened from view).

Please ensure the environmental document covers the following areas and answers the following questions:

1) The Project Aesthetics are of concern. Please respond to how a “rotating light house” that destroys panoramic views for all but attendees of the facility is justified.
2) Please provide materials to be used to construct all buildings.
3) Please explain how the use of the lighthouse as a marketing tool is a necessity and how the structure and movement of the structure is compatible with neighboring properties.
4) Please explain how a rotating restaurant promoting an event center and restaurant rather than ag production does not make the restaurant a primary rather than accessory use. Please explain exactly how the building meets an accessory restaurant definition.
5) Please explain how much water will be used on site to produce the AG crop, for 50 event attendees, for 75 attendees, for the restaurant, workers and for general usage on the property and how it will be provided. Is a well providing water on the property.
6) Placer County is currently working on a proposal for using state filtration devices to filter arsenic that the County has found is present in much of Placer County (see January 12th 2022 Board of Supervisor meeting). Please explain what if any water will require filtration and the type of filtration used. Also please provide any storage of water onsite.
7) Please explain why a variance for number of attendees should be granted when the newly created winery ordinance was specifically designed for 50 event attendees for Ag Promotional events for a winery of the proposed size.
8) The proposed design of the building (shape and heigh and movement) would require variances are needed for proposed usage. The proposed usage is beyond what other neighboring parcels are allowed. Please explain why this property is allowed privilege beyond what others are allowed.

9) Please provide VMT estimates for attendees and workers and any corresponding traffic fees for mitigation. How will sustainability goals in Placer County and for the State of California be met?
10) An explanation of how the requested 75 ft tall building is in compliance with California Government Code Section 65906.
11) Please explain how the property zoning allows for a commercial restaurant.
12) Please provide parking requirements
13) Please provide lighting requirements for the project proposal
14) Please provide hours of operation and applicable noise ordinances
15) Please provide any enforcement resources required to monitor the winery eveny activity and winery operation sactivity

Thank you for the opportunity to provide comments

Cheryl Berkema

Placer County Resident

Shirlee Herrington

From: Chuck-Muriel Davis <chamdavis@yahoo.com>
Sent: Monday, February 7, 2022 12:05 PM
To: Shirlee Herrington
Cc: Beverly Roberts; Jim Holmes
Subject: [EXTERNAL] Re: Courtesy Reminder: Project 8 Winery (PLN21-00198), Scoping Meeting- CONCERN
Attachments: Project 8 Winery NOP_FINAL.pdf

RE: Project 8 Winery (PLN21-00198), Scoping Meeting

Hi Shirlee,

I would like to file an official complaint and concern that this Scoping Meeting is being held in the middle of a work day, so that concerned residents who work are not able to attend!

As proposed, this project will have a huge impact on the Penryn area and the Penryn residents; which indicates that this Scoping Meeting should be held in the evening.

I request that the Feb 8th, 1pm, Scoping Meeting be held again in the evening, as a separate meeting or as part of the Horseshoe Bar/Penryn MAC meeting.

I also request the the comment period be extended 30 or more days beyond the Feb 11th date. This NOP will take time to decipher and there are more details of the project available in the NOP since the issue was at the HB/Penryn MAC.

Muriel Davis
2/7/2022

On Wednesday, February 2, 2022, 10:55:24 AM PST, Shirlee Herrington <sherring@placer.ca.gov> wrote:

Good Morning Interested Agencies and Individuals:

Friendly reminder regarding the Scoping Meeting scheduled for next Tuesday at 1pm.

Advisory: While the meeting is being offered both “in-person” and virtually via “Zoom”, the County encourages virtual participation due to the recent increase in COVID-19 transmission.

See below and attached for additional meeting information.

Shirlee Herrington

From: Chuck-Muriel Davis <chamdavis@yahoo.com>
Sent: Friday, February 11, 2022 12:04 PM
To: Shirlee Herrington; Placer County Environmental Coordination Services; Jennifer Byous
Cc: Jim Holmes; Beverly Roberts
Subject: [EXTERNAL] Project 8 Winery (PLN21-00198)--Concerns & comments

RE: Project 8 Winery (PLN21-00198)

TO: Planning Commissioners and Placer County CDRA

This winery project, as proposed, is inappropriate for the residential agriculture area of Penryn because it's scope is so expansive that it is more a commercial event center than a winery! A project this massive does not fit the area on Callison.

Here are a list of concerns:

1. **Attendees** - the variance to increase attendees from 50 to 75 should NOT be approved. The limit in the ordinance has proven to work well. And wineries already have a 200 person(at one time) maximum for special events. What I could not find in the NOP was a limit on the number of people in the restaurant.

2. **Restaurant** - the proposed restaurant is NOT an 'accessory restaurant' as is allowed in the winery ordinance. Almost half of the 4750sf 4th level is planned for the dining area....that's much too big for an 'accessory'. And where in Placer County is there a winery or restaurant that requires four stories with an elevator? At an earlier MAC meeting, the owner expressed his view of this project to be a 'destination' type place, and that would be a place that is more than a winery with an accessory restaurant!

3. **Ridgeline violation**- putting a 75ft tall building on a ridgeline in a residential agriculture violates the county ordinance on protecting our ridgelines. The wine tasting area can be below the ridgeline, along with an 'accessory' restaurant. But, if a destination restaurant is being requested, then it should not be part of the winery. One alternative would be to replace the pond on the corner of Taylor and Callison with the proposed huge restaurant.

4. **Traffic** - the scope of this project would attract people from all over, maybe to only ride the rotating restaurant, making this project an 'attraction', rather than a winery. The traffic created by this 'attraction' would create dangerous conditions on the following roads that are narrow and have ditches on both sides:
English Colony, Clark Tunnel, Callison, Sisley, and Rock Springs!
These roads are used by families to walk on and to ride bikes on.
Increased traffic would be hazardous!

Even without a restaurant, the traffic from the events would affect traffic because:

"*Agricultural Promotional Events could occur any day of the week from 7:00 AM to 10:00 PM. Pursuant to Section 17.56.330(D)(4)(a), Agricultural Promotional Events are not limited in number.* "

5. **Water contamination** - Residents have a real concern about the possible contamination of the underground water aquifer and possible contamination of the water in the PCWA canal. We hope the EIR will closely evaluate the water usage and filtering of the project.

6. **Dark Sky** - having a building on the top of a ridge would drastically affect the darkness in this Penryn area, which is currently very dark. Having downward lighting along the roads and pathways will be bad enough, but to have lighting 75 ft up affects the entire area.

These items are just a few of the concerns that residents of Penryn have! This project is of no benefit to the Penryn area, but as proposed, will negatively impact the quality of life for the families who live in the area. A four-story 'destination' restaurant with a rotating dining area would be more appropriate in an area by the I-80 corridor, perhaps higher up in the Newcastle or Auburn area.

Please do NOT allow this project to move forward as currently proposed.

Sincerely,
Muriel Davis
2/11/2022
Penryn

Shirlee I. Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, Ca 95603
sherring@placer.ca.gov

Dear Ms. Herrington,

Please accept this letter in reference to the Project 8 Winery NOP and the document presented at the community meeting.

We like many of our neighbors, have admired the new plantings of grapes along Taylor Road and Callison Road that augment our communities agricultural setting. However, we do have concerns about the proposed developments on the 17.96 acres. We submit the following comments to help provide responsible agencies and interested persons with additional concerns regarding the scope of this project.

Traffic Circulation

While the document provided for the meeting discusses road improvements on Callison Road infront of the winery entrance it does not take into consideration the impacts of traffic on Sisley Road, Old English Colony or Callison Road where it connects to Old English Colony. These Roads, (Sisley Road and Callison Road) travel through the rural residential community.

Community members run, bike, walk their dogs, ride horses, school age children will walk homefrom school on these roads during the winery's hours of operation. This presents a public safety concern. These roadways are narrow, have deep drainage ditches on the sides, blind curves, no center line and have no night lighting. Wine will be served at this facility which raises the concerns of DUI's, or at least some level of impaired driving and potential injuries to the community residents that live on these roads.

A commercial development of the size and scope that is proposed would be better suited to having an entrance off of Taylor Road where an entrance currently exists.

Further concern is the route of Sisley Road from Taylor Road to Callison Road. Sisley is a rural historic section of the Lincoln Highway; and needs to be protected from excessive use. Sisley Road is the most direct route from the intersections of Rock Springs and Taylor Road to the Callison Road entrance of the Winery. Again, community members run, bike, walk their dogs, ride horses, school age children will walk home from school on these roads during the winery's hours of operation. As is usually the case, visitors from outside this community will have little regard for the care and attention that is necessary while traveling our rural roads.

The historic status of Sisley Road and its necessary protections and uses must be

reviewed with an eye towards public safety and non-disruption of neighborhoods.

Accessory Use Restaurant

The proposed restaurant does not comply with the intended county guidelines. This proposed project would set a new precedent for development in Penryn beyond the intent and spirit of the Winery Ordinance Placer County established. The proposed full-service restaurant presents significant impacts to the present and reasonably foreseeable future of the developments in the Penryn community.

The Ridge Line

The proposed tower infringes on the ridge line policy of Placer County. The architectural rendering of the octagonal building, raising up 5 stories, is deceptive as is the surrounding tall tree line. Clearly a number of trees will be removed, and the tower will be significantly exposed. We suggest that significant study be given to the requested height of the building. Having the building relocated away from the ridge line and remain at the 36-foot level is acceptable. Additionally, the upper levels of this facility would provide an intrusionary view into the homes and yards of the neighborhood thereby invading the personal privacy of residents. A privacy that is one of the highly regarded reasons folks desire to live in this rural setting. This raises the potential of public nuisance violations.

Hours of Operation

As previously said, Penryn is a rural residential community. The proposed facility operating from 7 A. M. to 10 P.M. introduces an intense commercial atmosphere to their neighborhood. The established county limits of 50 attendees at one time for Agricultural Promotional Events is acceptable. However, there is no limit to the number of events. The proposed project plans on 208 events a year. A limit of the number of events must be considered should the Planning Commission approve the increase of attendees.

It should be recognized that increasing beyond this limit significantly increases traffic into the community unfamiliar with our roadways or the considerate bucolic lifestyle of the community. Additional persons and cars will increase the noise level, affect air quality, increase pollution, increase need for potable water, and increased wastewater. These issues should be given considerable review in the determination of an increase from the limit the 50 attendee limit as well as the number of events.

Amplfied Sound

In rural areas sound can travel significant distances. In similar situations a greater than 1600-foot setback has been recommended. Even with such a setback it is not uncommon for neighbors around the Valencia Club to hear the club's amplified sound. Amplified sound can be very disruptive to the neighborhood. This is why the vast majority of use permits prohibit outdoor amplified sound.

Septic System and Bio Reactor System

The project proposes a Septic permit be obtained from Placer County Environmental

Health Department. Separate and apart from the Septic System the project proposes a High Strength Membrane BioReactor system. BioReactor systems have greatly improved since first being introduced but there are still concerns of these systems potentially leaking into the ground affecting the quality of ground water and potentially creating a swampy area on neighboring parcels. A significant review of the BioReactor System and geological impacts must be given substantial consideration.

Night Sky - Light Pollution

Lighting is an issue in the rural area. Residents enjoy the night sky. Any lighting must be downward, limited solely to the project's land and turned off after closing.

Napa Green Certified

What exactly is this certification? It appears to be a vintner trade group that shares information on sustainable development and land use. Clearly a trade group has its own priorities and those differ significantly from the surrounding community. Review the attached link. https://www.northbaybusinessjournal.com/article/industry-news/napa-green-certification-whats-it- take-for-a-winery-or-vineyard-to-get-it/

Thank you for this opportunity to provide comments on this proposed project. We hope the planning department will review these issues and make the Project 8 Winery a project that can be enjoyed and supported by the community.

Sincerely,

Gary Cheris / Deborah Cheris

Gary and Deborah Cheris
7705 Logan Lane
Penryn, Ca 95663

gcheris@gmail.com

Project 8 Winery Project
NOP Scoping Meeting Comment Summary

Date: February 8, 2022
Time: 1:00 PM
Location: Planning Commission Hearing Room

I. Presentation by Project Planner Jennifer Byous

II. Verbal Comments (arranged in order of "appearance" of commenter):

In Person

Patty Neifer – Penryn Resident

- Remarked that she has researched EIRs following the NOP;
- Noted that CEQA requires analysis of aesthetic impacts;
- Read aloud what a ridgeline structure should look like in accordance with Placer County definitions and policies;
- Expressed concerns of potential impacts related to night lighting and interruption of scenic corridors (i.e., architecture type and height of the structure); and
- Expressed a desire for a project alternative where the structures are not built near a ridgeline.

Janet Kellman – Penryn Resident

- Expressed concerns over the project, which have spanned multiple months;
- Asked where does the commenter's freedom end and the developer's freedom begin;
- Asked why, given the culture and aesthetic of Penryn, does an "over-the-top" development need to be built;
- Asked why the project needs to be large and prominent;
- Expressed concern over the scale of the project;
- Asked if light fixtures associated with the project would be upward-facing and interfere with natural night views;
- Asked for the meaning of a minimum parking lot and if there is a maximum;
- Expressed concern regarding the access on Callison Road, which commenter believes is very dangerous (i.e., twisty and narrow), especially for potentially intoxicated people; and
- Asked if the entrance could be moved to Taylor Road.

Claudia Starkey - Penryn Resident

- Expressed concerns over the fencing's influence on local wildlife;
- Expressed concern about nighttime light and noise impacts and how such impacts would be prevented;

- Expressed concern about groundwater disruption, as all local residents are on wells that could be disrupted;
- Expressed concerns about placing the main site entrance on Callison Road, due to narrow pavement width;
- Expressed concern about developing a commercial project in a residential and agricultural area; and
- Disagreed that a large winery should be approved based on the property owner farming on the property.

Cheryl Schmit – Penryn Resident

- Detailed how the commenter, and many others, worked and saved to live in a rural residential area;
- The commenter's greatest concern is that the only access mentioned is on Callison Road, which the commenter believes can be dangerous;
- Expressed concern over increased traffic, as a result of the project;
- Expressed that other roads in the project vicinity should be analyzed, as the commenter believes such roads can also be dangerous, especially during inclement weather; and
- Wanted an alternative location for the proposed project, off of Taylor Road.

Gayle Russel – Penryn Resident

- Expressed that allowing the proposed project to bypass zoning regulations with respect to ridgelines is wrong;
- Advised that attention should be paid to potential aesthetic impacts associated with the project;
- Commented that Callison Road is not safe for the proposed project;
- Disagreed with overriding the County Winery Ordinance;
- Expressed concerns about night lighting; and
- Expressed concerns about potential drainage, erosion, and groundwater pollution impacts.

Mike Schmit – Penryn Resident

- Disagreed with the proposed height of the octagon building and the requested variance to allow the building to be constructed on top of the mountain;
- Commented that patrons from the Lincoln area would use "bad roads" to travel to the site;
- Expressed concern about nighttime light pollution;
- Expressed concern about privacy with views available from the octagon building;
- Commented that due to the rural residential nature of the area, 8:00 PM would be a more appropriate closing time for events than the proposed 10:00 PM;
- Noted that alternative restaurants are available in nearby downtown areas; and
- Expressed concern that fencing around Antelope Canal would restrict wildlife access.

Leslie Bizuratt – Granite Bay Area Resident

- Agreed with all previously shared concerns;
- Expressed concern about tree preservation and believes that the exhibits are not accurate, with the trees not likely to be preserved; and

- Remarked that the proposed project would require lots of grading and tree cutting that are not represented in the exhibits.

Ann Henderickson – Penryn Resident

- Remarked that the variance is not necessary and that the project needs could be met without the requested building height;
- Commented that the scope of the project is too large for Penryn;
- Expressed concern over increased traffic and the resulting increase in pollution;
- Remarked that there is too little water to support the project operation;
- Expressed concern that pesticides would contaminate groundwater;
- Remarked that the building is too large for the community;
- Remarked that a guard shack "would send a negative message about our community";
- Expressed concern that protected species and habitats are not mentioned in the NOP;
- Asked how the project would affect future roads;
- Asked how the project would benefit and serve the individuals living in the community;
- Asked if the project would commission a local artist;
- Recommended providing a walking path and picnic table for local residents to enjoy;
- Remarked that the structure does not fit in with the project site surroundings;
- Cited the Sacramento Bee to express that the size of the project does not fit the casual country vibe of the community;
- Expressed skepticism that the variance is necessary for proper wine filtration and believes the variance is unnecessary and should be denied;
- Asked if the proposed project would practice organic farming;
- Remarked that barbed wire fences will be dangerous to animals; and
- Remarked that there are many special-status species in the project area, which are not commented upon in the NOP.

Online

Carol Brock

- Remarked that the project site is designated for agricultural uses, and the proposed winery would be an industrial and retail project and, therefore, should not be considered for approval;
- Expressed concern about groundwater and well contamination;
- Asked if a report had been prepared about potential impacts the winery's well could have on local residential wells;
- Expressed concern about water supply for local homeowners;
- Expressed concern about pollution and safety impacts from project-generated traffic;
- Expressed concern that most of the year locals would have to be worried about their safety driving and walking around the project area, due to winding and narrow roads;
- Asked what safety measures would be taken to protect residents on roads and sidewalks;
- Asked if access to the site could be moved to Taylor Road to save the rural integrity of the area;
- Referenced Placer County General Plan Visual Resource Policies 1.K.4, 1.K.6, and 1.K.1;

- Expressed concern over potential erosion issues;
- Remarked that a fire pond is located on their property that eventually enters the Sacramento River and that a recent storm polluted the pond, due to poor erosion prevention practices by the project;
- Asked what remediations the homeowners could expect after the fact for erosion effects, noting potential impacts on property values and insurance; and
- Asked if the developer would bear any responsibility for protecting local water rights.

Neyamaya Stone

- Agreed with previously shared concerns;
- Remarked that the EIR should address volatile organic compounds that result from wine-making in the Air Quality/Greenhouse Gas Emissions chapter;
- Remarked that the Hazards chapter should evaluate potential impacts of fungicides used in wine-making on local livestock;
- Expressed concern about detention ponds in another local project;
- Remarked that the Hydrology chapter should include analysis of what aquifer project-generated wastewater would go into;
- Expressed concern that the octagon building's height cannot be mitigated;
- Asked if a scaled-back alternative would be considered, such as the project without the restaurant or with half the parking spaces; and
- Asked why 91 parking spaces are needed when the project is seeking an exception for 75 people, remarking that the implied 200 people would not be compatible with the surroundings.

Muriel Davis

- Agreed with all previously made statements;
- Remarked that commercial development does not fit with the area;
- Remarked that the ridgeline should be protected at all costs;
- Expressed concern about project-generated traffic on small roads that are narrow with ditches on either side, remarking that the roads cannot support project-generated traffic;
- Expressed concern about water pollution that could affect all local wells and the aquifer beneath;
- Expressed concern about potential impacts to agricultural uses from water pollution;
- Remarked that the trees would be cut down without permission;
- Expressed concern about air quality impacts from increased traffic;
- Expressed concern about noise and light pollution from year-round events;
- Expressed a desire to continue having views of the stars;
- Suggested that the restaurant be built by the pond off of Taylor Road;
- Expressed concern for the local wildlife;
- Remarked that the project does not fit the local aesthetic; and
- Expressed hopes that future meetings would be scheduled in the evening for ease of working people.

Marilyn Jasper – Public Interest Coalition

- Expressed concerns over the "exorbitant height" and the "questionable depth" of the proposed project;
- Expressed concern about inconsistencies in the description of the project dimensions across multiple documents;
- Remarked that the winery does not contain the necessary amount of acreage to hold the number of suggested attendees;
- Remarked that the County Winery Ordinance allows contiguous parcels that must be "deed restricted" and asked who would enforce those deed restrictions in perpetuity;
- Expressed concern about setbacks from the Antelope Canal;
- Expressed concern that the project's solar array would be inconsistent with the County not wanting anything on leach fields; and
- Remarked that the project should include an alternative location, preferably in a commercial zone.

Will Baird

- Asked how the project has proceeded to its current point without a meeting allowing for public comment;
- Remarked on current address off Callison Road;
- Expressed concern about the runoff from the "massive amounts" of dirt hauled to the site; and
- Remarked that the pictures presented in the meeting do not reflect the current reality.

Karen Green

- Remarked that the term "accessory restaurant" does not reflect the reality of what the restaurant will be;
- Remarked that the term, "accessory restaurant," is not clearly defined;
- Remarked that the proposed project goes beyond the scope of an "accessory" restaurant;
- Remarked that the project site is big enough to accommodate multiple uses at once and provide each with food, which is realistically beyond the scope of an accessory restaurant; and
- Remarked that what is being proposed is an event center, and should, therefore, be analyzed as such.

APPENDIX C

Project 8 Winery - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Project 8 Winery

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.66	Acre	3.66	159,429.60	0
Parking Lot	92.00	Space	0.83	36,800.00	0
Quality Restaurant	80.43	1000sqft	1.85	80,430.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction phase timing adjusted based on applicant-provided AQ Questionnaire.

Grading -

Vehicle Trips - Trip generation rate and lengths adjusted per project-specific rates and VMT provided by KD Anderson & Associates

Energy Mitigation -

Operational Off-Road Equipment - Off-road equipment info updated based on applicant-provided AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	600.00
tblConstructionPhase	NumDays	230.00	600.00
tblConstructionPhase	NumDays	20.00	240.00
tblConstructionPhase	NumDays	10.00	40.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	27.96
tblVehicleTrips	CNW_TL	6.60	27.96
tblVehicleTrips	CW_TL	14.70	62.28
tblVehicleTrips	ST_TR	90.04	2.14
tblVehicleTrips	SU_TR	71.97	2.14
tblVehicleTrips	WD_TR	83.84	2.14

2.0 Emissions Summary

Project 8 Winery - Placer County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2482	2.5283	2.0522	4.2300e-003	1.2074	0.1107	1.3181	0.5865	0.1018	0.6883	0.0000	372.7612	372.7612	0.1148	4.7000e-004	375.7707
2024	0.4109	2.1345	2.8203	6.2900e-003	0.4076	0.0886	0.4962	0.1061	0.0835	0.1896	0.0000	562.6785	562.6785	0.0806	0.0165	569.6210
2025	0.4347	2.0611	2.9289	6.6900e-003	0.2562	0.0780	0.3342	0.0690	0.0738	0.1428	0.0000	600.5837	600.5837	0.0764	0.0188	608.1014
2026	0.2013	0.9275	1.3122	2.9900e-003	0.1162	0.0352	0.1514	0.0313	0.0333	0.0646	0.0000	268.8445	268.8445	0.0342	8.2200e-003	272.1499
Maximum	**0.4347**	**2.5283**	**2.9289**	**6.6900e-003**	**1.2074**	**0.1107**	**1.3181**	**0.5865**	**0.1018**	**0.6883**	**0.0000**	**600.5837**	**600.5837**	**0.1148**	**0.0188**	**608.1014**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2482	2.5283	2.0522	4.2300e-003	1.2074	0.1107	1.3181	0.5865	0.1018	0.6883	0.0000	372.7608	372.7608	0.1148	4.7000e-004	375.7703
2024	0.4109	2.1345	2.8203	6.2900e-003	0.4076	0.0886	0.4962	0.1061	0.0835	0.1896	0.0000	562.6782	562.6782	0.0806	0.0165	569.6206
2025	0.4347	2.0611	2.9289	6.6900e-003	0.2562	0.0780	0.3342	0.0690	0.0738	0.1428	0.0000	600.5833	600.5833	0.0764	0.0188	608.1010
2026	0.2013	0.9275	1.3122	2.9900e-003	0.1162	0.0352	0.1514	0.0313	0.0333	0.0646	0.0000	268.8443	268.8443	0.0342	8.2200e-003	272.1497
Maximum	**0.4347**	**2.5283**	**2.9289**	**6.6900e-003**	**1.2074**	**0.1107**	**1.3181**	**0.5865**	**0.1018**	**0.6883**	**0.0000**	**600.5833**	**600.5833**	**0.1148**	**0.0188**	**608.1010**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-2-2023**	**4-1-2023**	0.8381	0.8381
2	**4-2-2023**	**7-1-2023**	0.6414	0.6414
3	**7-2-2023**	**10-1-2023**	0.6484	0.6484
4	**10-2-2023**	**1-1-2024**	0.6483	0.6483
5	**1-2-2024**	**4-1-2024**	0.5420	0.5420
6	**4-2-2024**	**7-1-2024**	0.6591	0.6591
7	**7-2-2024**	**10-1-2024**	0.6664	0.6664
8	**10-2-2024**	**1-1-2025**	0.6722	0.6722

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9	**1-2-2025**	**4-1-2025**	0.6181	0.6181
10	**4-2-2025**	**7-1-2025**	0.6190	0.6190
11	**7-2-2025**	**10-1-2025**	0.6259	0.6259
12	**10-2-2025**	**1-1-2026**	0.6319	0.6319
13	**1-2-2026**	**4-1-2026**	0.6159	0.6159
14	**4-2-2026**	**7-1-2026**	0.5019	0.5019
		Highest	0.8381	0.8381

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3670	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003
Energy	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	697.5280	697.5280	0.0461	0.0131	702.5792
Mobile	0.1211	0.2008	1.3092	2.9300e-003	0.3152	2.4800e-003	0.3177	0.0844	2.3300e-003	0.0868	0.0000	278.2954	278.2954	0.0144	0.0134	282.6414
Offroad	0.1424	1.6279	4.7087	3.6300e-003		0.0609	0.0609		0.0564	0.0564	0.0000	328.8210	328.8210	0.1064	0.0000	331.4796
Waste						0.0000	0.0000		0.0000	0.0000	14.8975	0.0000	14.8975	0.8804	0.0000	36.9079
Water						0.0000	0.0000		0.0000	0.0000	7.7452	12.7270	20.4722	0.7976	0.0190	46.0832
Total	**0.6778**	**2.2585**	**6.3805**	**9.1400e-003**	**0.3152**	**0.0961**	**0.4113**	**0.0844**	**0.0914**	**0.1758**	**22.6427**	**1,317.3745**	**1,340.0172**	**1.8449**	**0.0455**	**1,399.6947**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3670	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003
Energy	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	697.5002	697.5002	0.0461	0.0131	702.5512
Mobile	0.1211	0.2008	1.3092	2.9300e-003	0.3152	2.4800e-003	0.3177	0.0844	2.3300e-003	0.0868	0.0000	278.2954	278.2954	0.0144	0.0134	282.6414
Offroad	0.1424	1.6279	4.7087	3.6300e-003		0.0609	0.0609		0.0564	0.0564	0.0000	328.8210	328.8210	0.1064	0.0000	331.4796
Waste						0.0000	0.0000		0.0000	0.0000	14.8975	0.0000	14.8975	0.8804	0.0000	36.9079
Water						0.0000	0.0000		0.0000	0.0000	7.7452	12.7270	20.4722	0.7976	0.0190	46.0832
Total	**0.6778**	**2.2585**	**6.3805**	**9.1400e-003**	**0.3152**	**0.0961**	**0.4113**	**0.0844**	**0.0914**	**0.1758**	**22.6427**	**1,317.3467**	**1,339.9894**	**1.8449**	**0.0455**	**1,399.6666**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	2/24/2023	5	40	
2	Grading	Grading	2/25/2023	1/26/2024	5	240	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Paving	Paving	1/27/2024	2/23/2024	5	20	
4	Building Construction	Building Construction	2/24/2024	6/12/2026	5	600	
5	Architectural Coating	Architectural Coating	3/10/2024	6/26/2026	5	600	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 240

Acres of Paving: 4.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,645; Non-Residential Outdoor: 40,215; Striped Parking Area: 11,774 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	116.00	45.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3931	0.0000	0.3931	0.2021	0.0000	0.2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0532	0.5505	0.3649	7.6000e-004		0.0253	0.0253		0.0233	0.0233	0.0000	66.9014	66.9014	0.0216	0.0000	67.4423
Total	**0.0532**	**0.5505**	**0.3649**	**7.6000e-004**	**0.3931**	**0.0253**	**0.4185**	**0.2021**	**0.0233**	**0.2253**	**0.0000**	**66.9014**	**66.9014**	**0.0216**	**0.0000**	**67.4423**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	8.7000e-004	0.0116	4.0000e-005	4.4000e-003	2.0000e-005	4.4200e-003	1.1700e-003	2.0000e-005	1.1900e-003	0.0000	3.4376	3.4376	8.0000e-005	8.0000e-005	3.4646
Total	**1.2100e-003**	**8.7000e-004**	**0.0116**	**4.0000e-005**	**4.4000e-003**	**2.0000e-005**	**4.4200e-003**	**1.1700e-003**	**2.0000e-005**	**1.1900e-003**	**0.0000**	**3.4376**	**3.4376**	**8.0000e-005**	**8.0000e-005**	**3.4646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3931	0.0000	0.3931	0.2021	0.0000	0.2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0532	0.5505	0.3649	7.6000e-004		0.0253	0.0253		0.0233	0.0233	0.0000	66.9013	66.9013	0.0216	0.0000	67.4422
Total	**0.0532**	**0.5505**	**0.3649**	**7.6000e-004**	**0.3931**	**0.0253**	**0.4185**	**0.2021**	**0.0233**	**0.2253**	**0.0000**	**66.9013**	**66.9013**	**0.0216**	**0.0000**	**67.4422**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	8.7000e-004	0.0116	4.0000e-005	4.4000e-003	2.0000e-005	4.4200e-003	1.1700e-003	2.0000e-005	1.1900e-003	0.0000	3.4376	3.4376	8.0000e-005	8.0000e-005	3.4646
Total	**1.2100e-003**	**8.7000e-004**	**0.0116**	**4.0000e-005**	**4.4000e-003**	**2.0000e-005**	**4.4200e-003**	**1.1700e-003**	**2.0000e-005**	**1.1900e-003**	**0.0000**	**3.4376**	**3.4376**	**8.0000e-005**	**8.0000e-005**	**3.4646**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7897	0.0000	0.7897	0.3779	0.0000	0.3779	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1882	1.9729	1.6226	3.2600e-003		0.0852	0.0852		0.0784	0.0784	0.0000	286.6668	286.6668	0.0927	0.0000	288.9846
Total	**0.1882**	**1.9729**	**1.6226**	**3.2600e-003**	**0.7897**	**0.0852**	**0.8749**	**0.3779**	**0.0784**	**0.4563**	**0.0000**	**286.6668**	**286.6668**	**0.0927**	**0.0000**	**288.9846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5600e-003	3.9800e-003	0.0532	1.7000e-004	0.0202	1.0000e-004	0.0202	5.3600e-003	9.0000e-005	5.4500e-003	0.0000	15.7555	15.7555	3.5000e-004	3.9000e-004	15.8793
Total	**5.5600e-003**	**3.9800e-003**	**0.0532**	**1.7000e-004**	**0.0202**	**1.0000e-004**	**0.0202**	**5.3600e-003**	**9.0000e-005**	**5.4500e-003**	**0.0000**	**15.7555**	**15.7555**	**3.5000e-004**	**3.9000e-004**	**15.8793**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7897	0.0000	0.7897	0.3779	0.0000	0.3779	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1882	1.9729	1.6226	3.2600e-003		0.0852	0.0852		0.0784	0.0784	0.0000	286.6664	286.6664	0.0927	0.0000	288.9843
Total	**0.1882**	**1.9729**	**1.6226**	**3.2600e-003**	**0.7897**	**0.0852**	**0.8749**	**0.3779**	**0.0784**	**0.4563**	**0.0000**	**286.6664**	**286.6664**	**0.0927**	**0.0000**	**288.9843**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5600e-003	3.9800e-003	0.0532	1.7000e-004	0.0202	1.0000e-004	0.0202	5.3600e-003	9.0000e-005	5.4500e-003	0.0000	15.7555	15.7555	3.5000e-004	3.9000e-004	15.8793
Total	**5.5600e-003**	**3.9800e-003**	**0.0532**	**1.7000e-004**	**0.0202**	**1.0000e-004**	**0.0202**	**5.3600e-003**	**9.0000e-005**	**5.4500e-003**	**0.0000**	**15.7555**	**15.7555**	**3.5000e-004**	**3.9000e-004**	**15.8793**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1875	0.0000	0.1875	0.0468	0.0000	0.0468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2747
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.1875**	**7.2400e-003**	**0.1947**	**0.0468**	**6.6600e-003**	**0.0535**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2747**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.2000e-004	4.5100e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3963	1.3963	3.0000e-005	3.0000e-005	1.4067
Total	**4.7000e-004**	**3.2000e-004**	**4.5100e-003**	**1.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.3963**	**1.3963**	**3.0000e-005**	**3.0000e-005**	**1.4067**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1875	0.0000	0.1875	0.0468	0.0000	0.0468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0166	0.1703	0.1476	3.0000e-004		7.2400e-003	7.2400e-003		6.6600e-003	6.6600e-003	0.0000	26.0639	26.0639	8.4300e-003	0.0000	26.2746
Total	**0.0166**	**0.1703**	**0.1476**	**3.0000e-004**	**0.1875**	**7.2400e-003**	**0.1947**	**0.0468**	**6.6600e-003**	**0.0535**	**0.0000**	**26.0639**	**26.0639**	**8.4300e-003**	**0.0000**	**26.2746**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.2000e-004	4.5100e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3963	1.3963	3.0000e-005	3.0000e-005	1.4067
Total	**4.7000e-004**	**3.2000e-004**	**4.5100e-003**	**1.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.3963**	**1.3963**	**3.0000e-005**	**3.0000e-005**	**1.4067**

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	5.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0158**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1885**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.2000e-004	4.5100e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3963	1.3963	3.0000e-005	3.0000e-005	1.4067
Total	**4.7000e-004**	**3.2000e-004**	**4.5100e-003**	**1.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.3963**	**1.3963**	**3.0000e-005**	**3.0000e-005**	**1.4067**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	5.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0158**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1884**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.2000e-004	4.5100e-003	1.0000e-005	1.8300e-003	1.0000e-005	1.8400e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.3963	1.3963	3.0000e-005	3.0000e-005	1.4067
Total	**4.7000e-004**	**3.2000e-004**	**4.5100e-003**	**1.0000e-005**	**1.8300e-003**	**1.0000e-005**	**1.8400e-003**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.3963**	**1.3963**	**3.0000e-005**	**3.0000e-005**	**1.4067**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3525	257.3525	0.0609	0.0000	258.8739
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3525**	**257.3525**	**0.0609**	**0.0000**	**258.8739**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4400e-003	0.2140	0.0705	9.1000e-004	0.0295	1.2600e-003	0.0308	8.5400e-003	1.2000e-003	9.7500e-003	0.0000	86.8289	86.8289	2.6000e-004	0.0131	90.7507
Worker	0.0405	0.0276	0.3872	1.2800e-003	0.1572	7.2000e-004	0.1579	0.0418	6.6000e-004	0.0425	0.0000	119.8557	119.8557	2.4800e-003	2.8000e-003	120.7533
Total	**0.0460**	**0.2416**	**0.4577**	**2.1900e-003**	**0.1867**	**1.9800e-003**	**0.1887**	**0.0504**	**1.8600e-003**	**0.0523**	**0.0000**	**206.6846**	**206.6846**	**2.7400e-003**	**0.0159**	**211.5039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3522	257.3522	0.0609	0.0000	258.8736
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3522**	**257.3522**	**0.0609**	**0.0000**	**258.8736**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4400e-003	0.2140	0.0705	9.1000e-004	0.0295	1.2600e-003	0.0308	8.5400e-003	1.2000e-003	9.7500e-003	0.0000	86.8289	86.8289	2.6000e-004	0.0131	90.7507
Worker	0.0405	0.0276	0.3872	1.2800e-003	0.1572	7.2000e-004	0.1579	0.0418	6.6000e-004	0.0425	0.0000	119.8557	119.8557	2.4800e-003	2.8000e-003	120.7533
Total	**0.0460**	**0.2416**	**0.4577**	**2.1900e-003**	**0.1867**	**1.9800e-003**	**0.1887**	**0.0504**	**1.8600e-003**	**0.0523**	**0.0000**	**206.6846**	**206.6846**	**2.7400e-003**	**0.0159**	**211.5039**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2494	0.0820	1.0400e-003	0.0347	1.4600e-003	0.0362	0.0100	1.4000e-003	0.0114	0.0000	99.8894	99.8894	3.0000e-004	0.0151	104.4007
Worker	0.0448	0.0291	0.4272	1.4500e-003	0.1848	8.1000e-004	0.1857	0.0492	7.4000e-004	0.0499	0.0000	137.4637	137.4637	2.6400e-003	3.0900e-003	138.4504
Total	**0.0511**	**0.2786**	**0.5091**	**2.4900e-003**	**0.2195**	**2.2700e-003**	**0.2218**	**0.0592**	**2.1400e-003**	**0.0614**	**0.0000**	**237.3531**	**237.3531**	**2.9400e-003**	**0.0182**	**242.8511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3000e-003	0.2494	0.0820	1.0400e-003	0.0347	1.4600e-003	0.0362	0.0100	1.4000e-003	0.0114	0.0000	99.8894	99.8894	3.0000e-004	0.0151	104.4007
Worker	0.0448	0.0291	0.4272	1.4500e-003	0.1848	8.1000e-004	0.1857	0.0492	7.4000e-004	0.0499	0.0000	137.4637	137.4637	2.6400e-003	3.0900e-003	138.4504
Total	**0.0511**	**0.2786**	**0.5091**	**2.4900e-003**	**0.2195**	**2.2700e-003**	**0.2218**	**0.0592**	**2.1400e-003**	**0.0614**	**0.0000**	**237.3531**	**237.3531**	**2.9400e-003**	**0.0182**	**242.8511**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0800	0.7295	0.9410	1.5800e-003		0.0309	0.0309		0.0290	0.0290	0.0000	135.6729	135.6729	0.0319	0.0000	136.4702
Total	**0.0800**	**0.7295**	**0.9410**	**1.5800e-003**		**0.0309**	**0.0309**		**0.0290**	**0.0290**	**0.0000**	**135.6729**	**135.6729**	**0.0319**	**0.0000**	**136.4702**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7800e-003	0.1108	0.0364	4.6000e-004	0.0156	6.5000e-004	0.0162	4.5000e-003	6.2000e-004	5.1200e-003	0.0000	43.8300	43.8300	1.3000e-004	6.6300e-003	45.8093
Worker	0.0190	0.0119	0.1810	6.3000e-004	0.0829	3.5000e-004	0.0832	0.0221	3.2000e-004	0.0224	0.0000	60.1770	60.1770	1.0800e-003	1.3100e-003	60.5940
Total	**0.0217**	**0.1227**	**0.2174**	**1.0900e-003**	**0.0984**	**1.0000e-003**	**0.0994**	**0.0266**	**9.4000e-004**	**0.0275**	**0.0000**	**104.0070**	**104.0070**	**1.2100e-003**	**7.9400e-003**	**106.4032**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0800	0.7295	0.9410	1.5800e-003		0.0309	0.0309		0.0290	0.0290	0.0000	135.6727	135.6727	0.0319	0.0000	136.4700
Total	**0.0800**	**0.7295**	**0.9410**	**1.5800e-003**		**0.0309**	**0.0309**		**0.0290**	**0.0290**	**0.0000**	**135.6727**	**135.6727**	**0.0319**	**0.0000**	**136.4700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7800e-003	0.1108	0.0364	4.6000e-004	0.0156	6.5000e-004	0.0162	4.5000e-003	6.2000e-004	5.1200e-003	0.0000	43.8300	43.8300	1.3000e-004	6.6300e-003	45.8093
Worker	0.0190	0.0119	0.1810	6.3000e-004	0.0829	3.5000e-004	0.0832	0.0221	3.2000e-004	0.0224	0.0000	60.1770	60.1770	1.0800e-003	1.3100e-003	60.5940
Total	**0.0217**	**0.1227**	**0.2174**	**1.0900e-003**	**0.0984**	**1.0000e-003**	**0.0994**	**0.0266**	**9.4000e-004**	**0.0275**	**0.0000**	**104.0070**	**104.0070**	**1.2100e-003**	**7.9400e-003**	**106.4032**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1292	0.1919	3.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026
Total	**0.1605**	**0.1292**	**0.1919**	**3.1000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**	**0.0000**	**27.0645**	**27.0645**	**1.5200e-003**	**0.0000**	**27.1026**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6800e-003	5.2300e-003	0.0733	2.4000e-004	0.0298	1.4000e-004	0.0299	7.9200e-003	1.3000e-004	8.0500e-003	0.0000	22.6940	22.6940	4.7000e-004	5.3000e-004	22.8640
Total	**7.6800e-003**	**5.2300e-003**	**0.0733**	**2.4000e-004**	**0.0298**	**1.4000e-004**	**0.0299**	**7.9200e-003**	**1.3000e-004**	**8.0500e-003**	**0.0000**	**22.6940**	**22.6940**	**4.7000e-004**	**5.3000e-004**	**22.8640**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0192	0.1292	0.1919	3.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003	0.0000	27.0645	27.0645	1.5200e-003	0.0000	27.1026
Total	**0.1605**	**0.1292**	**0.1919**	**3.1000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**	**0.0000**	**27.0645**	**27.0645**	**1.5200e-003**	**0.0000**	**27.1026**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6800e-003	5.2300e-003	0.0733	2.4000e-004	0.0298	1.4000e-004	0.0299	7.9200e-003	1.3000e-004	8.0500e-003	0.0000	22.6940	22.6940	4.7000e-004	5.3000e-004	22.8640
Total	**7.6800e-003**	**5.2300e-003**	**0.0733**	**2.4000e-004**	**0.0298**	**1.4000e-004**	**0.0299**	**7.9200e-003**	**1.3000e-004**	**8.0500e-003**	**0.0000**	**22.6940**	**22.6940**	**4.7000e-004**	**5.3000e-004**	**22.8640**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**0.1963**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8800e-003	5.7800e-003	0.0847	2.9000e-004	0.0367	1.6000e-004	0.0368	9.7500e-003	1.5000e-004	9.9000e-003	0.0000	27.2557	27.2557	5.2000e-004	6.1000e-004	27.4514
Total	**8.8800e-003**	**5.7800e-003**	**0.0847**	**2.9000e-004**	**0.0367**	**1.6000e-004**	**0.0368**	**9.7500e-003**	**1.5000e-004**	**9.9000e-003**	**0.0000**	**27.2557**	**27.2557**	**5.2000e-004**	**6.1000e-004**	**27.4514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**0.1963**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8800e-003	5.7800e-003	0.0847	2.9000e-004	0.0367	1.6000e-004	0.0368	9.7500e-003	1.5000e-004	9.9000e-003	0.0000	27.2557	27.2557	5.2000e-004	6.1000e-004	27.4514
Total	**8.8800e-003**	**5.7800e-003**	**0.0847**	**2.9000e-004**	**0.0367**	**1.6000e-004**	**0.0368**	**9.7500e-003**	**1.5000e-004**	**9.9000e-003**	**0.0000**	**27.2557**	**27.2557**	**5.2000e-004**	**6.1000e-004**	**27.4514**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0847					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0727	0.1149	1.9000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	16.2132	16.2132	8.8000e-004	0.0000	16.2353
Total	**0.0955**	**0.0727**	**0.1149**	**1.9000e-004**		**3.2700e-003**	**3.2700e-003**		**3.2700e-003**	**3.2700e-003**	**0.0000**	**16.2132**	**16.2132**	**8.8000e-004**	**0.0000**	**16.2353**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0800e-003	2.5500e-003	0.0390	1.4000e-004	0.0178	7.0000e-005	0.0179	4.7500e-003	7.0000e-005	4.8100e-003	0.0000	12.9515	12.9515	2.3000e-004	2.8000e-004	13.0412
Total	**4.0800e-003**	**2.5500e-003**	**0.0390**	**1.4000e-004**	**0.0178**	**7.0000e-005**	**0.0179**	**4.7500e-003**	**7.0000e-005**	**4.8100e-003**	**0.0000**	**12.9515**	**12.9515**	**2.3000e-004**	**2.8000e-004**	**13.0412**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0847					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0727	0.1149	1.9000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	16.2131	16.2131	8.8000e-004	0.0000	16.2353
Total	**0.0955**	**0.0727**	**0.1149**	**1.9000e-004**		**3.2700e-003**	**3.2700e-003**		**3.2700e-003**	**3.2700e-003**	**0.0000**	**16.2131**	**16.2131**	**8.8000e-004**	**0.0000**	**16.2353**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0800e-003	2.5500e-003	0.0390	1.4000e-004	0.0178	7.0000e-005	0.0179	4.7500e-003	7.0000e-005	4.8100e-003	0.0000	12.9515	12.9515	2.3000e-004	2.8000e-004	13.0412
Total	**4.0800e-003**	**2.5500e-003**	**0.0390**	**1.4000e-004**	**0.0178**	**7.0000e-005**	**0.0179**	**4.7500e-003**	**7.0000e-005**	**4.8100e-003**	**0.0000**	**12.9515**	**12.9515**	**2.3000e-004**	**2.8000e-004**	**13.0412**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1211	0.2008	1.3092	2.9300e-003	0.3152	2.4800e-003	0.3177	0.0844	2.3300e-003	0.0868	0.0000	278.2954	278.2954	0.0144	0.0134	282.6414
Unmitigated	0.1211	0.2008	1.3092	2.9300e-003	0.3152	2.4800e-003	0.3177	0.0844	2.3300e-003	0.0868	0.0000	278.2954	278.2954	0.0144	0.0134	282.6414

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	172.12	172.12	172.12	856,908	856,908
Total	172.12	172.12	172.12	856,908	856,908

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Quality Restaurant	62.28	27.96	27.96	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933
Parking Lot	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quality Restaurant	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	229.6237	229.6237	0.0372	4.5000e-003	231.8943
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	229.6515	229.6515	0.0372	4.5000e-003	231.9223
NaturalGas Mitigated	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	467.8765	467.8765	8.9700e-003	8.5800e-003	470.6569
NaturalGas Unmitigated	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	467.8765	467.8765	8.9700e-003	8.5800e-003	470.6569

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	8.76767e+006	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	467.8765	467.8765	8.9700e-003	8.5800e-003	470.6569
Total		**0.0473**	**0.4298**	**0.3610**	**2.5800e-003**		**0.0327**	**0.0327**		**0.0327**	**0.0327**	**0.0000**	**467.8765**	**467.8765**	**8.9700e-003**	**8.5800e-003**	**470.6569**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	8.76767e+006	0.0473	0.4298	0.3610	2.5800e-003		0.0327	0.0327		0.0327	0.0327	0.0000	467.8765	467.8765	8.9700e-003	8.5800e-003	470.6569
Total		**0.0473**	**0.4298**	**0.3610**	**2.5800e-003**		**0.0327**	**0.0327**		**0.0327**	**0.0327**	**0.0000**	**467.8765**	**467.8765**	**8.9700e-003**	**8.5800e-003**	**470.6569**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	12880	1.1917	1.9000e-004	2.0000e-005	1.2035
Quality Restaurant	2.4692e+006	228.4598	0.0370	4.4800e-003	230.7189
Total		**229.6515**	**0.0372**	**4.5000e-003**	**231.9223**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	-100	-0.0093	0.0000	0.0000	-0.0093
Parking Lot	12780	1.1825	1.9000e-004	2.0000e-005	1.1942
Quality Restaurant	2.4691e+006	228.4505	0.0370	4.4800e-003	230.7095
Total		**229.6237**	**0.0372**	**4.5000e-003**	**231.8943**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3670	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003
Unmitigated	0.3670	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003
Total	**0.3670**	**1.0000e-005**	**1.6100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.1500e-003**	**3.1500e-003**	**1.0000e-005**	**0.0000**	**3.3500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.6100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.1500e-003	3.1500e-003	1.0000e-005	0.0000	3.3500e-003
Total	**0.3670**	**1.0000e-005**	**1.6100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.1500e-003**	**3.1500e-003**	**1.0000e-005**	**0.0000**	**3.3500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.4722	0.7976	0.0190	46.0832
Unmitigated	20.4722	0.7976	0.0190	46.0832

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24.4132 / 1.55829	20.4722	0.7976	0.0190	46.0832
Total		**20.4722**	**0.7976**	**0.0190**	**46.0832**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24.4132 / 1.55829	20.4722	0.7976	0.0190	46.0832
Total		**20.4722**	**0.7976**	**0.0190**	**46.0832**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.8975	0.8804	0.0000	36.9079
Unmitigated	14.8975	0.8804	0.0000	36.9079

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	73.39	14.8975	0.8804	0.0000	36.9079
Total		**14.8975**	**0.8804**	**0.0000**	**36.9079**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	73.39	14.8975	0.8804	0.0000	36.9079
Total		**14.8975**	**0.8804**	**0.0000**	**36.9079**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	8.00	250	89	0.20	CNG
Tractors/Loaders/Backhoes	8	8.00	260	97	0.37	Diesel
Tractors/Loaders/Backhoes	0	8.00	260	97	0.37	Diesel

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	5.0100e-003	0.2394	2.3898	3.8000e-004		4.6500e-003	4.6500e-003		4.6500e-003	4.6500e-003	0.0000	43.8400	43.8400	0.0142	0.0000	44.1945
Tractors/Loaders/ Backhoes	0.1374	1.3885	2.3189	3.2500e-003		0.0563	0.0563		0.0518	0.0518	0.0000	284.9809	284.9809	0.0922	0.0000	287.2852
Total	**0.1424**	**1.6279**	**4.7087**	**3.6300e-003**		**0.0609**	**0.0609**		**0.0564**	**0.0564**	**0.0000**	**328.8210**	**328.8210**	**0.1064**	**0.0000**	**331.4797**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Project 8 Winery

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.66	Acre	3.66	159,429.60	0
Parking Lot	92.00	Space	0.83	36,800.00	0
Quality Restaurant	80.43	1000sqft	1.85	80,430.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction phase timing adjusted based on applicant-provided AQ Questionnaire.

Grading -

Vehicle Trips - Trip generation rate and lengths adjusted per project-specific rates and VMT provided by KD Anderson & Associates

Energy Mitigation -

Operational Off-Road Equipment - Off-road equipment info updated based on applicant-provided AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	600.00
tblConstructionPhase	NumDays	230.00	600.00
tblConstructionPhase	NumDays	20.00	240.00
tblConstructionPhase	NumDays	10.00	40.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	27.96
tblVehicleTrips	CNW_TL	6.60	27.96
tblVehicleTrips	CW_TL	14.70	62.28
tblVehicleTrips	ST_TR	90.04	2.14
tblVehicleTrips	SU_TR	71.97	2.14
tblVehicleTrips	WD_TR	83.84	2.14

2.0 Emissions Summary

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7263	27.5625	18.9123	0.0401	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	3,893.1344	3,893.1344	1.1966	4.2800e-003	3,924.3251
2024	3.5191	17.0594	23.4130	0.0531	7.2742	0.7253	7.9994	3.4756	0.6672	4.1428	0.0000	5,247.6806	5,247.6806	0.9322	0.1611	5,311.9629
2025	3.3748	15.6717	23.0251	0.0524	2.0512	0.5977	2.6489	0.5503	0.5653	1.1156	0.0000	5,191.7804	5,191.7804	0.6444	0.1564	5,254.4868
2026	3.3486	15.6340	22.7726	0.0518	2.0512	0.5972	2.6484	0.5503	0.5648	1.1151	0.0000	5,138.3257	5,138.3257	0.6420	0.1521	5,199.6949
Maximum	**3.5191**	**27.5625**	**23.4130**	**0.0531**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**5,247.6806**	**5,247.6806**	**1.1966**	**0.1611**	**5,311.9629**

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7263	27.5625	18.9123	0.0401	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	3,893.1344	3,893.1344	1.1966	4.2800e-003	3,924.3251
2024	3.5191	17.0594	23.4130	0.0531	7.2742	0.7253	7.9994	3.4756	0.6672	4.1428	0.0000	5,247.6806	5,247.6806	0.9322	0.1611	5,311.9629
2025	3.3748	15.6717	23.0251	0.0524	2.0512	0.5977	2.6489	0.5503	0.5653	1.1156	0.0000	5,191.7804	5,191.7804	0.6444	0.1564	5,254.4868
2026	3.3486	15.6340	22.7726	0.0518	2.0512	0.5972	2.6484	0.5503	0.5648	1.1151	0.0000	5,138.3257	5,138.3257	0.6420	0.1521	5,199.6949
Maximum	**3.5191**	**27.5625**	**23.4130**	**0.0531**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**5,247.6806**	**5,247.6806**	**1.1966**	**0.1611**	**5,311.9629**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Energy	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Mobile	0.7444	1.0085	7.5131	0.0171	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,791.1355	1,791.1355	0.0834	0.0775	1,816.3060
Offroad	1.0971	12.5961	36.9560	0.0280		0.4700	0.4700		0.4353	0.4353	0.0000	2,803.0501	2,803.0501	0.9066		2,825.7142
Total	**4.1121**	**15.9597**	**46.4653**	**0.0592**	**1.8107**	**0.6627**	**2.4734**	**0.4833**	**0.6272**	**1.1105**	**0.0000**	**7,420.2271**	**7,420.2271**	**1.0442**	**0.1293**	**7,484.8577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Energy	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Mobile	0.7444	1.0085	7.5131	0.0171	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,791.1355	1,791.1355	0.0834	0.0775	1,816.3060
Offroad	1.0971	12.5961	36.9560	0.0280		0.4700	0.4700		0.4353	0.4353	0.0000	2,803.0501	2,803.0501	0.9066		2,825.7142
Total	**4.1121**	**15.9597**	**46.4653**	**0.0592**	**1.8107**	**0.6627**	**2.4734**	**0.4833**	**0.6272**	**1.1105**	**0.0000**	**7,420.2271**	**7,420.2271**	**1.0442**	**0.1293**	**7,484.8577**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	2/24/2023	5	40	
2	Grading	Grading	2/25/2023	1/26/2024	5	240	
3	Paving	Paving	1/27/2024	2/23/2024	5	20	
4	Building Construction	Building Construction	2/24/2024	6/12/2026	5	600	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	3/10/2024	6/26/2026	5	600	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 240

Acres of Paving: 4.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,645; Non-Residential Outdoor: 40,215; Striped Parking Area: 11,774 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	116.00	45.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0669	0.0383	0.6680	2.0100e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		205.8263	205.8263	4.0400e-003	4.2800e-003	207.2032
Total	**0.0669**	**0.0383**	**0.6680**	**2.0100e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**205.8263**	**205.8263**	**4.0400e-003**	**4.2800e-003**	**207.2032**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0669	0.0383	0.6680	2.0100e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		205.8263	205.8263	4.0400e-003	4.2800e-003	207.2032
Total	**0.0669**	**0.0383**	**0.6680**	**2.0100e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**205.8263**	**205.8263**	**4.0400e-003**	**4.2800e-003**	**207.2032**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0557	0.0319	0.5567	1.6800e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		171.5219	171.5219	3.3700e-003	3.5700e-003	172.6694
Total	**0.0557**	**0.0319**	**0.5567**	**1.6800e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**171.5219**	**171.5219**	**3.3700e-003**	**3.5700e-003**	**172.6694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0557	0.0319	0.5567	1.6800e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		171.5219	171.5219	3.3700e-003	3.5700e-003	172.6694
Total	**0.0557**	**0.0319**	**0.5567**	**1.6800e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**171.5219**	**171.5219**	**3.3700e-003**	**3.5700e-003**	**172.6694**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0520	0.0284	0.5192	1.6200e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		167.1745	167.1745	3.0400e-003	3.3300e-003	168.2415
Total	**0.0520**	**0.0284**	**0.5192**	**1.6200e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**167.1745**	**167.1745**	**3.0400e-003**	**3.3300e-003**	**168.2415**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0520	0.0284	0.5192	1.6200e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		167.1745	167.1745	3.0400e-003	3.3300e-003	168.2415
Total	**0.0520**	**0.0284**	**0.5192**	**1.6200e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**167.1745**	**167.1745**	**3.0400e-003**	**3.3300e-003**	**168.2415**

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.5882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5764**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0520	0.0284	0.5192	1.6200e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		167.1745	167.1745	3.0400e-003	3.3300e-003	168.2415
Total	**0.0520**	**0.0284**	**0.5192**	**1.6200e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**167.1745**	**167.1745**	**3.0400e-003**	**3.3300e-003**	**168.2415**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.5882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5764**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0520	0.0284	0.5192	1.6200e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		167.1745	167.1745	3.0400e-003	3.3300e-003	168.2415
Total	**0.0520**	**0.0284**	**0.5192**	**1.6200e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**167.1745**	**167.1745**	**3.0400e-003**	**3.3300e-003**	**168.2415**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0509	1.8356	0.6249	8.1500e-003	0.2758	0.0113	0.2871	0.0794	0.0108	0.0902		861.3832	861.3832	2.6500e-003	0.1303	900.2733
Worker	0.4025	0.2198	4.0151	0.0125	1.4817	6.4800e-003	1.4882	0.3929	5.9700e-003	0.3989		1,292.8162	1,292.8162	0.0235	0.0257	1,301.0675
Total	**0.4533**	**2.0554**	**4.6400**	**0.0207**	**1.7575**	**0.0178**	**1.7752**	**0.4724**	**0.0168**	**0.4891**		**2,154.1994**	**2,154.1994**	**0.0262**	**0.1560**	**2,201.3407**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0509	1.8356	0.6249	8.1500e-003	0.2758	0.0113	0.2871	0.0794	0.0108	0.0902		861.3832	861.3832	2.6500e-003	0.1303	900.2733
Worker	0.4025	0.2198	4.0151	0.0125	1.4817	6.4800e-003	1.4882	0.3929	5.9700e-003	0.3989		1,292.8162	1,292.8162	0.0235	0.0257	1,301.0675
Total	**0.4533**	**2.0554**	**4.6400**	**0.0207**	**1.7575**	**0.0178**	**1.7752**	**0.4724**	**0.0168**	**0.4891**		**2,154.1994**	**2,154.1994**	**0.0262**	**0.1560**	**2,201.3407**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0501	1.8198	0.6177	7.9800e-003	0.2758	0.0112	0.2870	0.0794	0.0107	0.0901		842.8612	842.8612	2.5900e-003	0.1275	880.9133
Worker	0.3780	0.1975	3.7668	0.0121	1.4817	6.2000e-003	1.4879	0.3929	5.7100e-003	0.3986		1,260.9758	1,260.9758	0.0213	0.0241	1,268.6925
Total	**0.4280**	**2.0173**	**4.3845**	**0.0201**	**1.7575**	**0.0174**	**1.7748**	**0.4723**	**0.0164**	**0.4888**		**2,103.8369**	**2,103.8369**	**0.0238**	**0.1516**	**2,149.6058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0501	1.8198	0.6177	7.9800e-003	0.2758	0.0112	0.2870	0.0794	0.0107	0.0901		842.8612	842.8612	2.5900e-003	0.1275	880.9133
Worker	0.3780	0.1975	3.7668	0.0121	1.4817	6.2000e-003	1.4879	0.3929	5.7100e-003	0.3986		1,260.9758	1,260.9758	0.0213	0.0241	1,268.6925
Total	**0.4280**	**2.0173**	**4.3845**	**0.0201**	**1.7575**	**0.0174**	**1.7748**	**0.4723**	**0.0164**	**0.4888**		**2,103.8369**	**2,103.8369**	**0.0238**	**0.1516**	**2,149.6058**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0494	1.8038	0.6121	7.8100e-003	0.2758	0.0111	0.2868	0.0794	0.0106	0.0900		825.0042	825.0042	2.5300e-003	0.1248	862.2469
Worker	0.3567	0.1794	3.5607	0.0117	1.4817	5.9000e-003	1.4876	0.3929	5.4300e-003	0.3984		1,231.2683	1,231.2683	0.0193	0.0228	1,238.5446
Total	**0.4060**	**1.9832**	**4.1728**	**0.0195**	**1.7574**	**0.0170**	**1.7744**	**0.4723**	**0.0160**	**0.4883**		**2,056.2725**	**2,056.2725**	**0.0219**	**0.1476**	**2,100.7915**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0494	1.8038	0.6121	7.8100e-003	0.2758	0.0111	0.2868	0.0794	0.0106	0.0900		825.0042	825.0042	2.5300e-003	0.1248	862.2469
Worker	0.3567	0.1794	3.5607	0.0117	1.4817	5.9000e-003	1.4876	0.3929	5.4300e-003	0.3984		1,231.2683	1,231.2683	0.0193	0.0228	1,238.5446
Total	**0.4060**	**1.9832**	**4.1728**	**0.0195**	**1.7574**	**0.0170**	**1.7744**	**0.4723**	**0.0160**	**0.4883**		**2,056.2725**	**2,056.2725**	**0.0219**	**0.1476**	**2,100.7915**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**1.5144**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0798	0.0436	0.7961	2.4800e-003	0.2938	1.2900e-003	0.2951	0.0779	1.1800e-003	0.0791		256.3342	256.3342	4.6600e-003	5.1000e-003	257.9703
Total	**0.0798**	**0.0436**	**0.7961**	**2.4800e-003**	**0.2938**	**1.2900e-003**	**0.2951**	**0.0779**	**1.1800e-003**	**0.0791**		**256.3342**	**256.3342**	**4.6600e-003**	**5.1000e-003**	**257.9703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**1.5144**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0798	0.0436	0.7961	2.4800e-003	0.2938	1.2900e-003	0.2951	0.0779	1.1800e-003	0.0791		256.3342	256.3342	4.6600e-003	5.1000e-003	257.9703
Total	**0.0798**	**0.0436**	**0.7961**	**2.4800e-003**	**0.2938**	**1.2900e-003**	**0.2951**	**0.0779**	**1.1800e-003**	**0.0791**		**256.3342**	**256.3342**	**4.6600e-003**	**5.1000e-003**	**257.9703**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0749	0.0392	0.7469	2.4000e-003	0.2938	1.2300e-003	0.2950	0.0779	1.1300e-003	0.0790		250.0211	250.0211	4.2100e-003	4.7800e-003	251.5511
Total	**0.0749**	**0.0392**	**0.7469**	**2.4000e-003**	**0.2938**	**1.2300e-003**	**0.2950**	**0.0779**	**1.1300e-003**	**0.0790**		**250.0211**	**250.0211**	**4.2100e-003**	**4.7800e-003**	**251.5511**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0749	0.0392	0.7469	2.4000e-003	0.2938	1.2300e-003	0.2950	0.0779	1.1300e-003	0.0790		250.0211	250.0211	4.2100e-003	4.7800e-003	251.5511
Total	**0.0749**	**0.0392**	**0.7469**	**2.4000e-003**	**0.2938**	**1.2300e-003**	**0.2950**	**0.0779**	**1.1300e-003**	**0.0790**		**250.0211**	**250.0211**	**4.2100e-003**	**4.7800e-003**	**251.5511**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0707	0.0356	0.7060	2.3200e-003	0.2938	1.1700e-003	0.2950	0.0779	1.0800e-003	0.0790		244.1308	244.1308	3.8300e-003	4.5200e-003	245.5735
Total	**0.0707**	**0.0356**	**0.7060**	**2.3200e-003**	**0.2938**	**1.1700e-003**	**0.2950**	**0.0779**	**1.0800e-003**	**0.0790**		**244.1308**	**244.1308**	**3.8300e-003**	**4.5200e-003**	**245.5735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0707	0.0356	0.7060	2.3200e-003	0.2938	1.1700e-003	0.2950	0.0779	1.0800e-003	0.0790		244.1308	244.1308	3.8300e-003	4.5200e-003	245.5735
Total	**0.0707**	**0.0356**	**0.7060**	**2.3200e-003**	**0.2938**	**1.1700e-003**	**0.2950**	**0.0779**	**1.0800e-003**	**0.0790**		**244.1308**	**244.1308**	**3.8300e-003**	**4.5200e-003**	**245.5735**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7444	1.0085	7.5131	0.0171	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,791.1355	1,791.1355	0.0834	0.0775	1,816.3060
Unmitigated	0.7444	1.0085	7.5131	0.0171	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,791.1355	1,791.1355	0.0834	0.0775	1,816.3060

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	172.12	172.12	172.12	856,908	856,908
Total	172.12	172.12	172.12	856,908	856,908

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Quality Restaurant	62.28	27.96	27.96	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933
Parking Lot	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quality Restaurant	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
NaturalGas Unmitigated	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24021	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Total		**0.2591**	**2.3550**	**1.9782**	**0.0141**		**0.1790**	**0.1790**		**0.1790**	**0.1790**		**2,826.0030**	**2,826.0030**	**0.0542**	**0.0518**	**2,842.7965**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24.021	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Total		**0.2591**	**2.3550**	**1.9782**	**0.0141**		**0.1790**	**0.1790**		**0.1790**	**0.1790**		**2,826.0030**	**2,826.0030**	**0.0542**	**0.0518**	**2,842.7965**

6.0 Area Detail

6.1 Mitigation Measures Area

Project 8 Winery - Placer County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Unmitigated	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2192					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6500e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Total	**2.0116**	**1.6000e-004**	**0.0179**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0385**	**0.0385**	**1.0000e-004**		**0.0410**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2192					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6500e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Total	**2.0116**	**1.6000e-004**	**0.0179**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0385**	**0.0385**	**1.0000e-004**		**0.0410**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	8.00	250	89	0.20	CNG
Tractors/Loaders/Backhoes	8	8.00	260	97	0.37	Diesel
Tractors/Loaders/Backhoes	0	8.00	260	97	0.37	Diesel

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0401	1.9153	19.1187	3.0600e-003		0.0372	0.0372		0.0372	0.0372	0.0000	386.6032	386.6032	0.1250		389.7291
Tractors/Loaders/ Backhoes	1.0570	10.6808	17.8373	0.0250		0.4328	0.4328		0.3982	0.3982	0.0000	2,416.4468	2,416.4468	0.7815		2,435.9850
Total	**1.0971**	**12.5961**	**36.9560**	**0.0280**		**0.4700**	**0.4700**		**0.4353**	**0.4353**	**0.0000**	**2,803.0501**	**2,803.0501**	**0.9066**		**2,825.7142**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Project 8 Winery - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Project 8 Winery

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	3.66	Acre	3.66	159,429.60	0
Parking Lot	92.00	Space	0.83	36,800.00	0
Quality Restaurant	80.43	1000sqft	1.85	80,430.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction phase timing adjusted based on applicant-provided AQ Questionnaire.

Grading -

Vehicle Trips - Trip generation rate and lengths adjusted per project-specific rates and VMT provided by KD Anderson & Associates

Energy Mitigation -

Operational Off-Road Equipment - Off-road equipment info updated based on applicant-provided AQ Questionnaire.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	600.00
tblConstructionPhase	NumDays	230.00	600.00
tblConstructionPhase	NumDays	20.00	240.00
tblConstructionPhase	NumDays	10.00	40.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	27.96
tblVehicleTrips	CNW_TL	6.60	27.96
tblVehicleTrips	CW_TL	14.70	62.28
tblVehicleTrips	ST_TR	90.04	2.14
tblVehicleTrips	SU_TR	71.97	2.14
tblVehicleTrips	WD_TR	83.84	2.14

2.0 Emissions Summary

Project 8 Winery - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7249	27.5720	18.8261	0.0399	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	3,872.6378	3,872.6378	1.1970	4.9600e-003	3,904.0419
2024	3.5064	17.0665	22.8201	0.0516	7.2742	0.7253	7.9994	3.4756	0.6672	4.1428	0.0000	5,095.8487	5,095.8487	0.9326	0.1664	5,161.7815
2025	3.3635	15.8675	22.4737	0.0510	2.0512	0.5977	2.6490	0.5503	0.5654	1.1156	0.0000	5,044.0105	5,044.0105	0.6472	0.1613	5,108.2627
2026	3.3386	15.8235	22.2540	0.0504	2.0512	0.5972	2.6485	0.5503	0.5649	1.1151	0.0000	4,994.2642	4,994.2642	0.6447	0.1568	5,057.0926
Maximum	**3.5064**	**27.5720**	**22.8201**	**0.0516**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**5,095.8487**	**5,095.8487**	**1.1970**	**0.1664**	**5,161.7815**

Project 8 Winery - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7249	27.5720	18.8261	0.0399	19.8869	1.2671	21.1540	10.1634	1.1657	11.3291	0.0000	3,872.6378	3,872.6378	1.1970	4.9600e-003	3,904.0419
2024	3.5064	17.0665	22.8201	0.0516	7.2742	0.7253	7.9994	3.4756	0.6672	4.1428	0.0000	5,095.8487	5,095.8487	0.9326	0.1664	5,161.7815
2025	3.3635	15.8675	22.4737	0.0510	2.0512	0.5977	2.6490	0.5503	0.5654	1.1156	0.0000	5,044.0105	5,044.0105	0.6472	0.1613	5,108.2627
2026	3.3386	15.8235	22.2540	0.0504	2.0512	0.5972	2.6485	0.5503	0.5649	1.1151	0.0000	4,994.2642	4,994.2642	0.6447	0.1568	5,057.0926
Maximum	**3.5064**	**27.5720**	**22.8201**	**0.0516**	**19.8869**	**1.2671**	**21.1540**	**10.1634**	**1.1657**	**11.3291**	**0.0000**	**5,095.8487**	**5,095.8487**	**1.1970**	**0.1664**	**5,161.7815**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Energy	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Mobile	0.6634	1.1593	7.5671	0.0159	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,661.9924	1,661.9924	0.0923	0.0838	1,689.2815
Offroad	1.0971	12.5961	36.9560	0.0280		0.4700	0.4700		0.4353	0.4353	0.0000	2,803.0501	2,803.0501	0.9066		2,825.7142
Total	**4.0311**	**16.1105**	**46.5192**	**0.0580**	**1.8107**	**0.6627**	**2.4734**	**0.4833**	**0.6272**	**1.1105**	**0.0000**	**7,291.0840**	**7,291.0840**	**1.0532**	**0.1356**	**7,357.8332**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Energy	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Mobile	0.6634	1.1593	7.5671	0.0159	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,661.9924	1,661.9924	0.0923	0.0838	1,689.2815
Offroad	1.0971	12.5961	36.9560	0.0280		0.4700	0.4700		0.4353	0.4353	0.0000	2,803.0501	2,803.0501	0.9066		2,825.7142
Total	**4.0311**	**16.1105**	**46.5192**	**0.0580**	**1.8107**	**0.6627**	**2.4734**	**0.4833**	**0.6272**	**1.1105**	**0.0000**	**7,291.0840**	**7,291.0840**	**1.0532**	**0.1356**	**7,357.8332**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	2/24/2023	5	40	
2	Grading	Grading	2/25/2023	1/26/2024	5	240	
3	Paving	Paving	1/27/2024	2/23/2024	5	20	
4	Building Construction	Building Construction	2/24/2024	6/12/2026	5	600	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	3/10/2024	6/26/2026	5	600	

Acres of Grading (Site Preparation Phase): 60

Acres of Grading (Grading Phase): 240

Acres of Paving: 4.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,645; Non-Residential Outdoor: 40,215; Striped Parking Area: 11,774 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	116.00	45.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0655	0.0479	0.5817	1.8100e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		185.3297	185.3297	4.4900e-003	4.9600e-003	186.9201
Total	**0.0655**	**0.0479**	**0.5817**	**1.8100e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**185.3297**	**185.3297**	**4.4900e-003**	**4.9600e-003**	**186.9201**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0655	0.0479	0.5817	1.8100e-003	0.2299	1.0600e-003	0.2310	0.0610	9.7000e-004	0.0619		185.3297	185.3297	4.4900e-003	4.9600e-003	186.9201
Total	**0.0655**	**0.0479**	**0.5817**	**1.8100e-003**	**0.2299**	**1.0600e-003**	**0.2310**	**0.0610**	**9.7000e-004**	**0.0619**		**185.3297**	**185.3297**	**4.4900e-003**	**4.9600e-003**	**186.9201**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0546	0.0399	0.4848	1.5100e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		154.4414	154.4414	3.7400e-003	4.1300e-003	155.7667
Total	**0.0546**	**0.0399**	**0.4848**	**1.5100e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**154.4414**	**154.4414**	**3.7400e-003**	**4.1300e-003**	**155.7667**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0546	0.0399	0.4848	1.5100e-003	0.1916	8.8000e-004	0.1925	0.0508	8.1000e-004	0.0516		154.4414	154.4414	3.7400e-003	4.1300e-003	155.7667
Total	**0.0546**	**0.0399**	**0.4848**	**1.5100e-003**	**0.1916**	**8.8000e-004**	**0.1925**	**0.0508**	**8.1000e-004**	**0.0516**		**154.4414**	**154.4414**	**3.7400e-003**	**4.1300e-003**	**155.7667**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0355	0.4527	1.4600e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		150.5606	150.5606	3.3900e-003	3.8500e-003	151.7926
Total	**0.0511**	**0.0355**	**0.4527**	**1.4600e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**150.5606**	**150.5606**	**3.3900e-003**	**3.8500e-003**	**151.7926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0355	0.4527	1.4600e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		150.5606	150.5606	3.3900e-003	3.8500e-003	151.7926
Total	**0.0511**	**0.0355**	**0.4527**	**1.4600e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**150.5606**	**150.5606**	**3.3900e-003**	**3.8500e-003**	**151.7926**

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.5882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5764**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0355	0.4527	1.4600e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		150.5606	150.5606	3.3900e-003	3.8500e-003	151.7926
Total	**0.0511**	**0.0355**	**0.4527**	**1.4600e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**150.5606**	**150.5606**	**3.3900e-003**	**3.8500e-003**	**151.7926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.5882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5764**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0511	0.0355	0.4527	1.4600e-003	0.1916	8.4000e-004	0.1924	0.0508	7.7000e-004	0.0516		150.5606	150.5606	3.3900e-003	3.8500e-003	151.7926
Total	**0.0511**	**0.0355**	**0.4527**	**1.4600e-003**	**0.1916**	**8.4000e-004**	**0.1924**	**0.0508**	**7.7000e-004**	**0.0516**		**150.5606**	**150.5606**	**3.3900e-003**	**3.8500e-003**	**151.7926**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0470	1.9736	0.6484	8.1700e-003	0.2758	0.0113	0.2871	0.0794	0.0109	0.0903		863.5070	863.5070	2.4800e-003	0.1307	902.5185
Worker	0.3951	0.2745	3.5007	0.0113	1.4817	6.4800e-003	1.4882	0.3929	5.9700e-003	0.3989		1,164.3352	1,164.3352	0.0262	0.0298	1,173.8625
Total	**0.4421**	**2.2481**	**4.1491**	**0.0195**	**1.7575**	**0.0178**	**1.7753**	**0.4724**	**0.0168**	**0.4892**		**2,027.8421**	**2,027.8421**	**0.0287**	**0.1605**	**2,076.3810**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0470	1.9736	0.6484	8.1700e-003	0.2758	0.0113	0.2871	0.0794	0.0109	0.0903		863.5070	863.5070	2.4800e-003	0.1307	902.5185
Worker	0.3951	0.2745	3.5007	0.0113	1.4817	6.4800e-003	1.4882	0.3929	5.9700e-003	0.3989		1,164.3352	1,164.3352	0.0262	0.0298	1,173.8625
Total	**0.4421**	**2.2481**	**4.1491**	**0.0195**	**1.7575**	**0.0178**	**1.7753**	**0.4724**	**0.0168**	**0.4892**		**2,027.8421**	**2,027.8421**	**0.0287**	**0.1605**	**2,076.3810**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0462	1.9570	0.6408	8.0000e-003	0.2758	0.0112	0.2870	0.0794	0.0108	0.0902		844.9757	844.9757	2.4200e-003	0.1279	883.1465
Worker	0.3718	0.2465	3.2873	0.0109	1.4817	6.2000e-003	1.4879	0.3929	5.7100e-003	0.3986		1,135.8923	1,135.8923	0.0238	0.0279	1,144.8001
Total	**0.4180**	**2.2035**	**3.9281**	**0.0189**	**1.7575**	**0.0174**	**1.7749**	**0.4723**	**0.0165**	**0.4888**		**1,980.8680**	**1,980.8680**	**0.0262**	**0.1558**	**2,027.9466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Project 8 Winery - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0462	1.9570	0.6408	8.0000e-003	0.2758	0.0112	0.2870	0.0794	0.0108	0.0902		844.9757	844.9757	2.4200e-003	0.1279	883.1465
Worker	0.3718	0.2465	3.2873	0.0109	1.4817	6.2000e-003	1.4879	0.3929	5.7100e-003	0.3986		1,135.8923	1,135.8923	0.0238	0.0279	1,144.8001
Total	**0.4180**	**2.2035**	**3.9281**	**0.0189**	**1.7575**	**0.0174**	**1.7749**	**0.4723**	**0.0165**	**0.4888**		**1,980.8680**	**1,980.8680**	**0.0262**	**0.1558**	**2,027.9466**

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0455	1.9403	0.6347	7.8300e-003	0.2758	0.0111	0.2869	0.0794	0.0106	0.0900		827.1029	827.1029	2.3600e-003	0.1252	864.4618
Worker	0.3516	0.2237	3.1090	0.0106	1.4817	5.9000e-003	1.4876	0.3929	5.4300e-003	0.3984		1,109.2928	1,109.2928	0.0217	0.0264	1,117.6900
Total	**0.3971**	**2.1640**	**3.7437**	**0.0184**	**1.7574**	**0.0170**	**1.7745**	**0.4723**	**0.0161**	**0.4884**		**1,936.3958**	**1,936.3958**	**0.0241**	**0.1515**	**1,982.1518**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0455	1.9403	0.6347	7.8300e-003	0.2758	0.0111	0.2869	0.0794	0.0106	0.0900		827.1029	827.1029	2.3600e-003	0.1252	864.4618
Worker	0.3516	0.2237	3.1090	0.0106	1.4817	5.9000e-003	1.4876	0.3929	5.4300e-003	0.3984		1,109.2928	1,109.2928	0.0217	0.0264	1,117.6900
Total	**0.3971**	**2.1640**	**3.7437**	**0.0184**	**1.7574**	**0.0170**	**1.7745**	**0.4723**	**0.0161**	**0.4884**		**1,936.3958**	**1,936.3958**	**0.0241**	**0.1515**	**1,982.1518**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**1.5144**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0544	0.6941	2.2400e-003	0.2938	1.2900e-003	0.2951	0.0779	1.1800e-003	0.0791		230.8596	230.8596	5.2000e-003	5.9000e-003	232.7486
Total	**0.0784**	**0.0544**	**0.6941**	**2.2400e-003**	**0.2938**	**1.2900e-003**	**0.2951**	**0.0779**	**1.1800e-003**	**0.0791**		**230.8596**	**230.8596**	**5.2000e-003**	**5.9000e-003**	**232.7486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**1.5144**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0544	0.6941	2.2400e-003	0.2938	1.2900e-003	0.2951	0.0779	1.1800e-003	0.0791		230.8596	230.8596	5.2000e-003	5.9000e-003	232.7486
Total	**0.0784**	**0.0544**	**0.6941**	**2.2400e-003**	**0.2938**	**1.2900e-003**	**0.2951**	**0.0779**	**1.1800e-003**	**0.0791**		**230.8596**	**230.8596**	**5.2000e-003**	**5.9000e-003**	**232.7486**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0489	0.6518	2.1600e-003	0.2938	1.2300e-003	0.2950	0.0779	1.1300e-003	0.0790		225.2200	225.2200	4.7200e-003	5.5300e-003	226.9862
Total	**0.0737**	**0.0489**	**0.6518**	**2.1600e-003**	**0.2938**	**1.2300e-003**	**0.2950**	**0.0779**	**1.1300e-003**	**0.0790**		**225.2200**	**225.2200**	**4.7200e-003**	**5.5300e-003**	**226.9862**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0737	0.0489	0.6518	2.1600e-003	0.2938	1.2300e-003	0.2950	0.0779	1.1300e-003	0.0790		225.2200	225.2200	4.7200e-003	5.5300e-003	226.9862
Total	**0.0737**	**0.0489**	**0.6518**	**2.1600e-003**	**0.2938**	**1.2300e-003**	**0.2950**	**0.0779**	**1.1300e-003**	**0.0790**		**225.2200**	**225.2200**	**4.7200e-003**	**5.5300e-003**	**226.9862**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0697	0.0444	0.6164	2.0900e-003	0.2938	1.1700e-003	0.2950	0.0779	1.0800e-003	0.0790		219.9460	219.9460	4.3100e-003	5.2300e-003	221.6109
Total	**0.0697**	**0.0444**	**0.6164**	**2.0900e-003**	**0.2938**	**1.1700e-003**	**0.2950**	**0.0779**	**1.0800e-003**	**0.0790**		**219.9460**	**219.9460**	**4.3100e-003**	**5.2300e-003**	**221.6109**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.3336					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**1.5045**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0697	0.0444	0.6164	2.0900e-003	0.2938	1.1700e-003	0.2950	0.0779	1.0800e-003	0.0790		219.9460	219.9460	4.3100e-003	5.2300e-003	221.6109
Total	**0.0697**	**0.0444**	**0.6164**	**2.0900e-003**	**0.2938**	**1.1700e-003**	**0.2950**	**0.0779**	**1.0800e-003**	**0.0790**		**219.9460**	**219.9460**	**4.3100e-003**	**5.2300e-003**	**221.6109**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Project 8 Winery - Placer County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6634	1.1593	7.5671	0.0159	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,661.9924	1,661.9924	0.0923	0.0838	1,689.2815
Unmitigated	0.6634	1.1593	7.5671	0.0159	1.8107	0.0137	1.8244	0.4833	0.0128	0.4961		1,661.9924	1,661.9924	0.0923	0.0838	1,689.2815

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	172.12	172.12	172.12	856,908	856,908
Total	172.12	172.12	172.12	856,908	856,908

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Quality Restaurant	62.28	27.96	27.96	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933
Parking Lot	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quality Restaurant	0.471784	0.062342	0.210554	0.149446	0.031993	0.008043	0.015744	0.011852	0.000547	0.000437	0.031376	0.000948	0.004933

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
NaturalGas Unmitigated	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24021	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Total		**0.2591**	**2.3550**	**1.9782**	**0.0141**		**0.1790**	**0.1790**		**0.1790**	**0.1790**		**2,826.0030**	**2,826.0030**	**0.0542**	**0.0518**	**2,842.7965**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	24.021	0.2591	2.3550	1.9782	0.0141		0.1790	0.1790		0.1790	0.1790		2,826.0030	2,826.0030	0.0542	0.0518	2,842.7965
Total		**0.2591**	**2.3550**	**1.9782**	**0.0141**		**0.1790**	**0.1790**		**0.1790**	**0.1790**		**2,826.0030**	**2,826.0030**	**0.0542**	**0.0518**	**2,842.7965**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Unmitigated	2.0116	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2192					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6500e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Total	**2.0116**	**1.6000e-004**	**0.0179**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0385**	**0.0385**	**1.0000e-004**		**0.0410**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2192					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.7907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6500e-003	1.6000e-004	0.0179	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0385	0.0385	1.0000e-004		0.0410
Total	**2.0116**	**1.6000e-004**	**0.0179**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**		**0.0385**	**0.0385**	**1.0000e-004**		**0.0410**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	8.00	250	89	0.20	CNG
Tractors/Loaders/Backhoes	8	8.00	260	97	0.37	Diesel
Tractors/Loaders/Backhoes	0	8.00	260	97	0.37	Diesel

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0401	1.9153	19.1187	3.0600e-003		0.0372	0.0372		0.0372	0.0372	0.0000	386.6032	386.6032	0.1250		389.7291
Tractors/Loaders/ Backhoes	1.0570	10.6808	17.8373	0.0250		0.4328	0.4328		0.3982	0.3982	0.0000	2,416.4468	2,416.4468	0.7815		2,435.9850
Total	**1.0971**	**12.5961**	**36.9560**	**0.0280**		**0.4700**	**0.4700**		**0.4353**	**0.4353**	**0.0000**	**2,803.0501**	**2,803.0501**	**0.9066**		**2,825.7142**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Placer County APCD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	5.23100E-002	3.51420E-001	5.42850E-001	8.90000E-004	1.64500E-002	1.64500E-002	0.00000E+000	7.65976E+001	7.65976E+001	4.23000E-003	0.00000E+000	7.67033E+001
Cranes	8.39500E-002	8.64250E-001	4.59540E-001	1.51000E-003	3.64300E-002	3.35200E-002	0.00000E+000	1.33075E+002	1.33075E+002	4.30400E-002	0.00000E+000	1.34151E+002
Excavators	2.25600E-002	1.84380E-001	3.91000E-001	6.20000E-004	9.03000E-003	8.31000E-003	0.00000E+000	5.44440E+001	5.44440E+001	1.76100E-002	0.00000E+000	5.48842E+001
Forklifts	8.06300E-002	7.58320E-001	1.02223E+000	1.38000E-003	4.18400E-002	3.84900E-002	0.00000E+000	1.20862E+002	1.20862E+002	3.90900E-002	0.00000E+000	1.21839E+002
Generator Sets	8.19900E-002	7.35180E-001	1.09834E+000	1.97000E-003	3.03200E-002	3.03200E-002	0.00000E+000	1.69562E+002	1.69562E+002	6.49000E-003	0.00000E+000	1.69724E+002
Graders	4.57300E-002	5.53390E-001	2.02750E-001	7.90000E-004	1.79300E-002	1.65000E-002	0.00000E+000	6.97617E+001	6.97617E+001	2.25600E-002	0.00000E+000	7.03258E+001
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25832E+000	8.25832E+000	2.67000E-003	0.00000E+000	8.32510E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15707E+000	7.15707E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64843E+000
Rubber Tired Dozers	1.23340E-001	1.28289E+000	5.59390E-001	1.54000E-003	5.77700E-002	5.31500E-002	0.00000E+000	1.35043E+002	1.35043E+002	4.36800E-002	0.00000E+000	1.36135E+002
Tractors/Loaders/ Backhoes	1.73860E-001	1.75743E+000	2.73950E+000	3.83000E-003	7.92800E-002	7.29400E-002	0.00000E+000	3.36098E+002	3.36098E+002	1.08700E-001	0.00000E+000	3.38815E+002
Welders	6.77200E-002	4.06910E-001	4.96830E-001	7.70000E-004	1.30000E-002	1.30000E-002	0.00000E+000	5.64662E+001	5.64662E+001	5.51000E-003	0.00000E+000	5.66040E+001

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	5.23100E-002	3.51420E-001	5.42840E-001	8.90000E-004	1.64500E-002	1.64500E-002	0.00000E+000	7.65975E+001	7.65975E+001	4.23000E-003	0.00000E+000	7.67032E+001
Cranes	8.39500E-002	8.64250E-001	4.59540E-001	1.51000E-003	3.64300E-002	3.35200E-002	0.00000E+000	1.33075E+002	1.33075E+002	4.30400E-002	0.00000E+000	1.34151E+002
Excavators	2.25600E-002	1.84380E-001	3.91000E-001	6.20000E-004	9.03000E-003	8.31000E-003	0.00000E+000	5.44440E+001	5.44440E+001	1.76100E-002	0.00000E+000	5.48842E+001
Forklifts	8.06300E-002	7.58320E-001	1.02222E+000	1.38000E-003	4.18400E-002	3.84900E-002	0.00000E+000	1.20862E+002	1.20862E+002	3.90900E-002	0.00000E+000	1.21839E+002
Generator Sets	8.19900E-002	7.35180E-001	1.09834E+000	1.97000E-003	3.03200E-002	3.03200E-002	0.00000E+000	1.69562E+002	1.69562E+002	6.49000E-003	0.00000E+000	1.69724E+002
Graders	4.57300E-002	5.53390E-001	2.02750E-001	7.90000E-004	1.79300E-002	1.65000E-002	0.00000E+000	6.97617E+001	6.97617E+001	2.25600E-002	0.00000E+000	7.03257E+001
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25831E+000	8.25831E+000	2.67000E-003	0.00000E+000	8.32509E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15706E+000	7.15706E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64842E+000
Rubber Tired Dozers	1.23340E-001	1.28289E+000	5.59390E-001	1.54000E-003	5.77700E-002	5.31500E-002	0.00000E+000	1.35043E+002	1.35043E+002	4.36800E-002	0.00000E+000	1.36135E+002
Tractors/Loaders/Backhoes	1.73860E-001	1.75743E+000	2.73950E+000	3.83000E-003	7.92800E-002	7.29400E-002	0.00000E+000	3.36097E+002	3.36097E+002	1.08700E-001	0.00000E+000	3.38815E+002
Welders	6.77200E-002	4.06910E-001	4.96830E-001	7.70000E-004	1.30000E-002	1.30000E-002	0.00000E+000	5.64661E+001	5.64661E+001	5.51000E-003	0.00000E+000	5.66039E+001

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	1.84213E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17497E-006	1.17497E-006	0.00000E+000	0.00000E+000	1.17335E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20233E-006	1.20233E-006	0.00000E+000	0.00000E+000	1.19269E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10205E-006	1.10205E-006	0.00000E+000	0.00000E+000	1.09321E-006
Forklifts	0.00000E+000	0.00000E+000	9.78253E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15834E-006	1.15834E-006	0.00000E+000	0.00000E+000	1.14905E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.17838E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14676E-006	1.14676E-006	0.00000E+000	0.00000E+000	1.27976E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21090E-006	1.21090E-006	0.00000E+000	0.00000E+000	1.20119E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.39722E-006	1.39722E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15126E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18480E-006	1.18480E-006	0.00000E+000	0.00000E+000	1.17530E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19013E-006	1.19013E-006	0.00000E+000	0.00000E+000	1.18059E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23666E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.08	0.02	0.08	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.50	0.14	0.50	0.14	0.00	0.00
Grading	Fugitive Dust	0.98	0.42	0.98	0.42	0.00	0.00
Grading	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.39	0.20	0.39	0.20	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting		
Yes	On-site Renewable	300.00	

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Project 8 Winery

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Project 8 Winery Propane Emissions

Pollutant	Emissions Factor (lbs/1,000 gallons)	Annual Propane Usage (1,000 gallons/yr)	Total Annual Emissions (lbs/yr)
PM	0.7	95.716921	67.00184498
NOx	13	95.716921	1244.319978
CO2	12,500	95.716921	1196461.517

MTCO2e/yr =

Annual Energy Demand* (kBTU/yr)	Propane Conversion (kBTU/Gallon)	Annual Total Gallons of Propane (gallons/yr)
8,767,670	91.6	95716.9214

* Based on the CalEEMod total annual natural gas usage for the proposed project

Total Project Emissions

	ROG (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)
Total Emissions from CalEEMod	4.11	16.11	2.47
Natural Gas Emissions	0.2591	2.355	0.179
Propane Emissions	0	3.409095831	0.183566699
Total Project Emissions	**3.8509**	**17.16409583**	**2.474566699**

0.0034
830.13
282.64
331.48
36.91
46.08

1527.2434

Total Daily Emissions (lbs/day)
0.183566699
3.409095831
3277.97676

598.230759

CO2e (MT/yr) - Energy
702.5512
470.6569
598.230759
830.1250587

APPENDIX D



Biological Resources Assessment

7615 Callison Road

Placer County, California
26 September 2022

MADRONE ECOLOGICAL CONSULTING

Prepared for:
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Building Engineering & Management, Inc.
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1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment (BRA) conducted for the 7615 Callison Road project (Study Area) by Madrone Ecological Consulting, LLC (Madrone). The approximately 18.2-acre Study Area is part of a larger 43-acre Property generally located west of the intersection of Taylor Road and Callison Road, in the unincorporated community of Penryn, Placer County, California. The Study Area is within Sections 23 and 26, Township 12 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) (**Figure 1**).

1.1 Project Description

The proposed project consists of the development of a full production winery, including grape vineyards, wine production facilities, tasting room, accessory restaurant and associated facilities totaling approximately 18.2 acres (Study Area) within three separate, contiguous parcels, and associated sections of railroad right-of way, which combined, total approximately 43 acres (APN 031-220-061, 032-124-080, and 032-124-044). See **Attachment A** for a preliminary site layout and grading plan. When fully operational, the winery will process grapes grown on site and purchased from specialized vineyards and will produce over 20,000 cases of wine annually. The proposed project is considered a Covered Activity under the Placer County Conservation Program (PCCP)

Facilities

Vineyard:
A minimum of two acres of vineyard will be planted onsite in accordance with Placer County Code Section 17.56.330, Winery and Farm Breweries.

Guard Shack:
The guard shack will be located adjacent to the gates at the main entrance north of the roundabout. It will consist of a small building with a bathroom and will house controls for the gates and exterior lighting for the entrance and lower roadway.

Utility Building:
The utility building hosts the main electrical service, interlock to an adjacent diesel generator, interlock to solar arrays, multiple water pumps, miscellaneous utility distribution and maintenance equipment storage.

Processing Building:
The processing building supports bottling, product storage, supply storage, equipment storage, shipping and receiving with an enclosed truck dock. It covers a ground level, mezzanine level, and seating area on the roof for a scenic overlook. This building is also linked to the octagon building at the top of the hill by a continuous meandering walkway providing a scenic surface connection between the two buildings.

Octagon Building:

The octagon building sits atop the hill. The first level is 20 feet below grade and houses the upper incoming grape processing. The building's ground level has an octagonal shape with a living façade comprised of an exoskeletal structure covered with plant life to ensure it will blend in with its environment. This level has a porte cochère where wine can be picked up by patrons and which serves as the point of entry to the reception area where there are two elevators as well as stairs for access to the upper levels, the below-grade processing level and the wine caves below to a maximum depth of 75 feet below grade. There will also be a restroom, administration area, and an outdoor terrace on this level. The second level will house the caretaker's suite. The third level will contain the commercial kitchen, storage and patron bathrooms. The fourth level will be the tasting room/accessory restaurant offering a panoramic view of Placer County to the patrons with a perimeter turn table floor slowly rotating the patrons 360 degrees every 45 minutes. This level will be circular in shape. A third elevator for staff use will serve levels three and four. The fifth and final is used to facilitate gravity filtration of the wine during processing. This is carried out by bringing the unfinished wine to the top level in vessels and allowing it to flow down to the level of the wine cave in the heart of the hillside. This vertical journey creates the necessary pressure for the wine to be filtered without the use of pumps which is critical for achieving the highest quality product possible. This building will reach an approximate height of 75 feet above ground.

Wine Cave:

The wine cave will be constructed below ground at a maximum depth of 75 feet below grade. The planned layout consists of a fermentation tank room, barrel aging rooms, two meeting rooms and two restrooms. Access is achieved by way of the aforementioned elevator shaft as well as two additional pedestrian exits.

Circulation

Primary vehicular access to the site will be provided directly from Callison Road, approximately 2,400 feet west of Callison Road's intersection with Taylor Road. Callison Road would be raised three feet at the winery entrance to eliminate an existing dip and improve visibility for egress from the project. Minimal other improvements are proposed to Callison in order to maintain the rural nature of the existing roadway.

Onsite circulation begins with a 150-foot diameter roundabout circling a well landscaped planter with a picturesque statue in the center. A gated entry leads to a private drive designed to meet County requirements with a minimum width of 20-foot paved surface plus 2-foot shoulders gently weaving its way toward the processing building. The drive then leads to the octagon building where there is an additional roundabout on top of the hill allowing directional change for larger vehicles.

Construction of the Project is scheduled to commence summer of 2023.

2.0 REGULATORY SETTING

This section describes federal, state, and local laws and policies that are relevant to this assessment of biological resources.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of any dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U. S. Environmental Protection Agency. Waters of the United States include all navigable waters; interstate waters and wetlands; all intrastate waters and wetlands that could affect interstate or foreign commerce; impoundments of the above; tributaries of the above; territorial seas; and wetlands adjacent to the above.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11.). Likewise, Section 3513 of the California Fish & Game Code prohibits the "take or possession" of any migratory non-game bird identified under the MBTA. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the MBTA.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The USFWS may authorize take of bald eagles and

golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS) (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g. tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

2.2.2 State Endangered Species Act

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e. that for which a state agency is not a lead agency), CESA enables CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

2.2.3 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.4 California Species of Special Concern

The Species of Special Concern (SSC) are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under the federal or California ESAs or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered, or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

SSC are typically associated with habitats that are threatened. Project-related impacts to SSC, state-threatened or endangered species are considered "significant" under CEQA.

2.2.5 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.2.6 Clean Water Act, Section 401

Section 401 of the Clean Water Act requires any applicant for a 404 permit (see Section 2.1.2) to also obtain a water quality certification with the applicable Regional Water Quality Control Board (RWQCB). Alternatively, if no 404 permit is required due to lack of USACE jurisdiction, the project proponent must submit a Notice of Intent to enroll under the Statewide General Waste Discharge Requirements for Projects Outside of Federal Jurisdiction. The Section 401 program is meant to protect these waters and wetlands by ensuring that waste discharged into them meets state water quality standards.

2.2.7 California Water Code, Porter-Cologne Act

The Porter Cologne Act, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt water discharge requirements (WDRs). "Waters of the state" are defined as any surface water or groundwater, including saline waters, within the boundaries of the state.

2.2.8 California Fish and Game Code, Section 1600 – Lake and Streambed Alteration Agreement

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

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

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, it will require that the parties enter into a Lake or Streambed Alteration Agreement (LSAA).

2.2.9 California Fish and Game Code, Section 3503.5 - Raptor Nests

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

2.2.10 Oak Woodland Conservation

Section 21083.4 of the Public Resources Code, which went into effect in January 2005, requires California counties acting as lead agencies under CEQA to determine whether a project "may result in a conversion of oak woodlands that will have a significant effect on the environment." If individual or cumulative impacts on oak woodlands are identified, the law requires that the impacts be mitigated. Acceptable mitigation measures include but are not limited to using conservation easements to conserve other oak woodlands, planting replacement trees that must be maintained for 7 years, and contributing to the Oak Woodland Conservation Fund established under Section 1363(a) of the California Fish and Game Code.

2.3 Local Regulations

2.3.1 Woodland Conservation

The Placer County (County) Woodland Conservation section of the County code (Section 19.50) was established to allow development of vacant land while reducing the loss of trees to reasonably acceptable levels to protect and preserve remaining native oak and other species of trees within Placer County. "Trees" under the Tree Ordinance includes all tall woody plants native to California (except grey pines and "brush"), with a single main stem or trunk at least five inches in diameter at breast height (DBH), or with multiple trunks with an aggregate of at least ten inches DBH. Each Tree has a "Protected Zone," which is a circle equal to the largest radius of a protected tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's dripline. The Tree Ordinance requires a Tree Permit for any activity within the Protected Zone of a Tree related to a discretionary project. In addition, a Tree Permit is required for the removal of any Protected Tree, unless otherwise exempted. If a development activity is authorized under Section 19.10.070 (pay PCCP land conversion fees) for impacts to oak woodlands, then the requirements of the PCCP authorization exceed the standards of Section 19.50 and shall prevail.

2.3.2 Placer County Conservation Program

The PCCP is a County-proposed solution to coordinate and streamline the permitting process by allowing local entities to issue state and federal permits. The PCCP complies with Article 19.10 of the Placer County Code and is required when applying for land conversion authorization in accordance with County Code Article 19.10.070. The PCCP is a Habitat Conservation Plan (HCP) under the Federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP includes the County Aquatic Resources Program (CARP), which allows streamlined issuance of permits related to the Federal Clean Water Act and the California Fish and Game Code. The PCCP has been adopted by the County and mandates that any project that requires a discretionary permit or other approval participate in the PCCP and pay the associated land cover conversion fees. Conversion of both upland and aquatic landcover types require fees under the PCCP.

3.0 METHODOLOGY

3.1 Previous Studies and Literature Review

Madrone conducted an aquatic resources delineation on 30 June and 1 July 2020 (Madrone 2021a). The delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016).

Protocol-level special-status plant surveys were conducted by Madrone biologists on 16 April and 20 May 2021 (Madrone 2021b) in accordance with the U.S. Fish and Wildlife Service's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 1996), California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018), and the *CNPS Botanical Survey Guidelines* (CNPS 2001). The results of these surveys are summarized in this document and are discussed throughout this document as appropriate.

An arborist report prepared by California Tree and Landscape Consulting, Inc. (Cal TLC 2020). The report was reviewed in preparation of this document.

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2022) query of the Study Area and all areas within 5 miles of the Study Area (**Figure 2**);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2022) query for the Study Area (**Attachment B**);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2022) query of the "Rocklin, California" USGS topo quadrangle, and the eight surrounding quadrangles (**Attachment C**); and
- Western Bat Working Group (WBWG) Species Matrix (WBWG 2022).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

For the purposes of this Biological Resources Assessment, special-status species are defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by CDFW;

- identified as Fully Protected species or species of special concern by CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2022); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
  - CRPR 1A: Plants presumed extinct.
  - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
  - CRPR 2A: Plants extirpated in California, but common elsewhere.
  - CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
  - CRPR 3: Plants about which the CNPS needs more information – a review list.

3.2 BRA Field Surveys

Madrone biologists Dustin Brown and Matt Shaffer conducted a field survey of the Study Area and overall Property Boundary on 30 June, 1 July, and 31 December 2020 and 16 April and 20 May 2021 to assess the suitability of habitats on-site to support special-status species. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition* (Sawyer, Keeler-Wolf and Evens 2009) but were cross-walked to the closest land cover types as described in the PCCP, and plant taxonomy was based on the nomenclature in the *Jepson eFlora* (Jepson Flora Project 2021). A list of all wildlife species observed during field survey is included as **Attachment D**. On 31 December 2020 a bat roost habitat assessment was conducted for all trees located within the Study Area. The purpose of this survey was to determine whether suitable bat roost habitat (caves, tree hollows, snags, or tree cavities) occurs within the Study Area.

4.0 EXISTING CONDITIONS

The Study Area is located west of the intersection of Taylor Road and Callison Road. The site is bounded to the south by a Union Pacific Railroad right-of-way and Callison Road, and to the north by a Union Pacific Railroad right-of-way. Rural large ranchette residential lots and ruderal grassland border the site to the east and west. The Study Area is accessible from the southern edge via an unnamed paved road off of Callison Road. The Study Area consists of a large hill at the northern end of site that generally slopes downward toward the southern boundary. In addition, the topography gently slopes downward from east to west. The Study Area consists of rolling topography; the elevation on-site ranges from approximately 725 feet above mean sea level (MSL) at the southwest corner to 930 feet above MSL at the summit of the hill in the northeast portion of the Study Area.

The Study Area primarily consists of barren areas that have been plowed and prepped for the planting of vineyards. The barren areas occur on more level parts of the site from the approximate middle of the property to the south end of the Study Area. Much of these areas previously consisted of shrubland but was burned in a fire and cleared between 2018 and 2020. Portions of this area at the south end of the site were completely unvegetated at the time of the surveys; other areas consist of sparse to robust patches of ruderal grasses and forbs that are regularly maintained.

Annual brome grassland is located along the lower slopes of the hill in the northwest portion of the site. The vegetation within this community is generally robust, and is dominated by annual grasses and forbs. The higher-elevation portions of the hill in the northeast section of the Study Area feature oak woodland dominated by blue oak (*Quercus douglasii*).

Small patches of oak woodland and nonnative ornamental trees are located along Callison Road, which cuts through the site at the southern boundary. In addition, several unvegetated dirt roads are interspersed throughout the Study Area. A small group of cattle are currently grazing the northern portion of the Study Area in the blue oak woodland.

A segment of the Antelope Canal, a concrete-lined irrigation and municipal water canal, flows through the Study Area. The landowner, in conjunction with the Placer County Water Agency (PCWA) is planning to encase this canal within the Project area prior to the commencement of construction of the Project.

4.1 Terrestrial Land Cover Types

The larger Property contains approximately 42.7 acres of terrestrial land cover types including several natural and human-influenced terrestrial land cover types including Annual Brome Grassland, Barren, Blue Oak Woodland, Interior Live Oak Woodland, Mixed Oak Woodland, Riparian, and Urban Woodland. See **Attachment E** for a land cover map of the entire Property.

The smaller 18.2-acre Study Area contains approximately 18.1 acres of terrestrial land cover types including several natural and human-influenced terrestrial land cover types including Annual Brome Grassland, Barren, Blue Oak Woodland, Interior Live Oak Woodland, Mixed Oak Woodland, and Urban Woodland (**Figure 5**). See below for descriptions of the various land cover types.

Table 1. Terrestrial Land Cover Types Mapped within the entire Property

Resource Type	Acreage
Barren	9.2
Blue Oak Woodland	6.1
Annual Brome Grassland	2.6
Interior Live Oak Woodland	<0.1
Urban Woodland	<0.1
Mixed Oak Woodland	0.1
Total	**18.1**

4.1.1 Barren

The most abundant vegetation community within the Study Area is barren. This community is present throughout much of the site, from the approximate middle of the Property to the south end of the site. Most of this area has been plowed and prepped for the planting of vineyards. Where vegetation is present it consists of ruderal grasses and forbs such as tumble mustard (*Hirschfeldia incana*), stinkwort (*Dittrichia*

graveolens), yellow star-thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), skeleton weed (*Chondrilla juncea*), hedgehog grass (*Cynosurus echinatus*), rose clover (*Trifolium hirtum*), moth mullein (*Verbascum blattaria*), woolly mullein (*Verbascum thapsus*), yellow devil's claw (*Proboscidea lutea*), spiny cockleburr (*Xanthium spinosum*), manyflower tobacco (*Nicotiana acuminata*), Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Festuca perennis*), and wild oat (*Avena fatua*). The mesic portion of the barren areas include more facultative-dominant species such as Muehlenberg's centaury (*Zeltnera muehlenbergii*), curly dock (*Rumex crispus*), bird's foot trefoil (*Lotus corniculatus*), English plantain (*Plantago lanceolata*), white clover (*Trifolium repens*), poison hemlock (*Conium maculatum*), and pennyroyal (*Mentha pulegium*).

The barren land cover type also includes portions of Callison Road, which is a paved public road that bisects the Study Area along the southern boundary of the site. In addition, several small dirt and gravel roads are interspersed throughout the Study Area, within the barren and blue oak woodland land cover types.

4.1.2 Blue Oak Woodland

Blue oak woodland occurs within the northeast portion of the Study Area, along the higher-elevation portion of the large hill on-site. Blue oak trees dominate the tree stratum. Other common tree species within this community include interior live oak (*Quercus wislizeni*), black oak (*Quercus kelloggii*), California buckeye (*Aesculus californica*), and grey pine (*Pinus sabiniana*). The understory is generally sparsely vegetated, and is dominated by soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), hedgehog grass, wild oat, and rose clover. Additional species present within the understory include tall sock-destroyer (*Torilis arvensis*), Italian thistle (*Carduus pycnocephalus*), California pipevine (*Aristolochia californica*), California brome grass (*Bromus carinatus*), blue dicks (*Dichelostemma capitatum*), and purple needle grass (*Stipa pulchra*).

4.1.3 Annual Brome Grassland

Annual brome grassland is located within the northwest portion of the Study Area, along the lower slopes of a hill. The grassland is composed of a similar suite of species as the understory of the blue oak woodland, and is dominated by upland annual grasses and forbs such as soft chess, ripgut brome, hedgehog grass, wild oat, and rose clover. Some ruderal vegetation occurs within this community as well, such as fennel (*Foeniculum vulgare*) and yellow star-thistle.

4.1.4 Interior Live Oak Woodland

The live oak woodland community is located along Callison Road in the southern portion of the Study Area. The community is dominated by interior live oak, with an understory of toyon (*Heteromeles arbutifolia*) and some annual grasses and forbs.

4.1.5 Urban Woodland

Nonnative ornamental trees occur along Callison Road at the southeast corner of the Study Area. Tree species within this community include deodar cedar (*Cedrus deodara*), blue gum (*Eucalyptus globulus*), and coast redwood (*Sequoia sempervirens*).

4.1.6 Mixed Oak Woodland

The mixed oak woodland community occurs at the southwest boundary of the Study Area. Tree cover includes valley oak (*Quercus lobata*), incense cedar (*Calocedrus decurrens*), Goodding's black willow, and interior live oak. The understory consists of sandbar willow (*Salix exigua*), coyote brush (*Baccharis pilularis*), Himalayan blackberry, and toyon, as well as several annual grasses and forbs.

4.2 Hydrology

Surface water within the Study Area is driven by rainfall; water within the majority of the site topographically drains towards a shallow non-wetland swale within the center of the site, which then drains into an off-site pond located just west of the Study Area. Water within the pond empties into a series of unnamed drainages which flow southwest, eventually emptying into Antelope Creek. Antelope Creek is a tributary to Dry Creek, which drains into Steelhead Creek, then Bannon Slough, and ultimately the Sacramento River. The Study Area is located in the Dry Creek Watershed, which is part of the larger Lower American River Watershed (HUC 18020111) (USGS 1984). Water within the Antelope Canal within the Study Area originates from several sources including the Yuba, Bear, and American Rivers.

4.3 Aquatic Resources

A protocol-level aquatic resources delineation has been conducted for the Study Area by Madrone (Madrone 2021a). Aquatic resources mapped within the Study Area are depicted in **Figure 3**. Please see **Attachment E** for all aquatic resources located within the entire Property.

A total of 0.099 acre of aquatic resources were mapped within the Study Area (**Table 2**) (Madrone 2021a). A description of each of the aquatic resource types is included below.

Table 2. Aquatic Resources Mapped within the Study Area

Aquatic Resource Type	Acreage
Canal	0.093
Roadside Ditch	0.006
Total	**0.099**

4.3.1 Canal

The Antelope Canal runs within the northern portion of the site, along the slope of a large hill within the Study Area. The canal is approximately 7 feet wide, and generally bisects the blue oak woodland to the north, and annual grassland and barren habitat to the south. The feature is a uniform, concrete-lined channel that is completely devoid of vegetation. Water within the canal runs to the northwest through the Study Area before crossing under a Union Pacific Railroad right-of-way to the north of the site.

The Antelope Canal is a man-made feature that conveys irrigation water from several sources including the Yuba River, Bear River, and the American River to properties in Penryn, Loomis, and unincorporated portions of western Placer County.

Madrone suggests that the aquatic resources delineation be submitted to the USACE with a request for a jurisdictional determination prior to any impacts to determine whether a Clean Water Act permit is necessary. However, the portion of the Antelope Canal that flows through the Project is slated to be encased by PCWA prior to the commencement of the Project.

4.3.2 Roadside Ditch

A small roadside drainage ditch is located within the southern portion of the Study Area, along the south side of Callison Road. The ditch is an unvegetated, shallow dirt feature that conveys ephemeral stormwater runoff from Callison Road; water within the ditch drains a short distance to the southwest into a culvert.

Madrone suggests that the aquatic resources delineation be submitted to the USACE with a request for a jurisdictional determination prior to any impacts to determine whether a Clean Water Act permit is necessary.

4.4 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2021), four soil mapping units occur within the Study Area: (108) Andregg coarse sandy loam, 15 to 30 percent slopes; (111) Andregg coarse sandy loam, rocky, 30 to 50 percent slopes; (130) Caperton-Andregg coarse sandy loams, 2 to 15 percent slopes; and (132) Caperton-Rock outcrop complex, 2 to 30 percent slopes (**Figure 4**). The soils within the Study Area fall within the hydrological soil groups B or D. Group B soils generally have a moderate infiltration rate when thoroughly wet and a moderate rate of water transmission, while group D soils have a slow infiltration rate when thoroughly wet, a very slow rate of water transmission, and typically a higher runoff potential. None of these soil map units have been identified as containing special soils, such as serpentine or saline-alkali inclusions (NRCS 2022).

4.5 Protected Trees

Cal TLC inventoried a total of 345 trees within the Study Area (**Figure 6**)."Trees" under the Tree Ordinance includes all tall woody plants native to California (except grey pines and "brush"), with a single main stem or trunk at least six inches in diameter at breast height (DBH), or with multiple trunks with an aggregate of at least ten inches DBH. See Table 3 below for a summary of the trees located within the Study Area and **Attachment E** for the tree survey data. Of the 345 trees within the Study Area, 331 are native trees protected by the County and 14 are non-native ornamentals or gray pines which are not protected.

The arborist rating is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The scale is as follows:

- Rating 0: This indicates a tree that has no significant sign of life.
- Rating 1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change.
- Rating 2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, risk of failure may be reduced and the rating may be elevated to a 3 depending on the type and location of defects. If no action is taken the tree is considered a risk liability and should be removed.
- Rating 3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or and risk reduced.
- Rating 4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future risk of branch or tree failure can be reduced and more serious health problems can be averted.
- Rating 5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common.

Typically, trees with a rating of 0 through 2 are either dead or have major health or structural problems and do not need to be mitigated for. Only trees with an arborist rating of 3 through 5 are required to be mitigated for. Note that projects that participate in the PCCP and pay land conversion fees for impacts to oak woodland land cover are not required to mitigate for impacts to individual protected trees. Please see Section 8.1.2 below for protected trees mitigation.

Table 3. Trees Mapped Within the Study Area

Arborist Rating	1	2	3	4	5	Total 1-5	Total 3-5
Species	**Number of Trees (DBH)**						
Buckeye	-	1 (15)	3 (30)	-	-	**4 (45)**	**3(30)**
Incense Cedar	-	5 (40)	1 (12)	-	-	**6 (52)**	**1 (12)**
Deodar Cedar	-	2 (16)	-	-	-	**2 (16)**	**-**
Blue Gum Eucalyptus	1 (44)	1 (13)	-	-	-	**2 (57)**	**-**
Toyon	1 (7)	-	-	-	-	**1 (7)**	**-**
Ponderosa Pine	-	3 (54)	1 (18)	-	-	**4 (72)**	**1 (18)**
Gray Pine	1 (12)	1 (18)	-	-	-	**2 (30)**	**-**
Blue Oak	20 (216)	87 (1,214)	42 (556)	2 (45)	-	**151 (2,031)**	**44 (601)**
California Black Oak	2 (34)	5 (50)	4 (49)	-	-	**11 (133)**	**4 (49)**
Valley Oak	-	-	1 (13)	-	-	**1 (13)**	**1 (13)**
Interior Live Oak	64 (1,069)	88 (1,412)	7 (84)	-	-	**159 (2,565)**	**7 (84)**
Oracle Oak	-	-	1 (14)	-	-	**1 (14)**	**1 (14)**
Coast Redwood	-	-	1 (22)	-	-	**1 (22)**	**1 (22)**
Number of Trees	**89**	**193**	**61**	**2**	**-**	**345**	**63**
Cumulative DBH	**1,382**	**2,832**	**798**	**45**	**-**	**5,057**	**843**

5.0 SPECIAL-STATUS SPECIES

Table 4 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted on-site.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during surveys conducted on-site, or the site is outside the known range of the species.

Figure 2 exhibits CNDDB occurrences within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur on the site.

Table 4. Special-Status Species with Potential to Occur within the 7615 Callsion Road Study Area

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Plants				
Allium jepsonii Jepson's onion	--	CRPR 1B.2	Serpentine or volcanic soils within chaparral, cismontane woodland, or lower montane coniferous forest.	**No Habitat Present.** No serpentine or volcanic soils located within the Study Area.
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	**Absent.** Marginally suitable habitat is present in the bue oak woodland and annual brome grassland. The species was not observed during the 2021 protocol surveys.
Calystegia stebbinsii Stebbin's morning-glory	FE	CE, CRPR 1B.1	Gabberonic or serpentine soils within chaparral openings or cismontaine woodland.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Carex xerophila Chaparral sedge	--	CRPR 1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Ceanothus roderrickii Pine Hill ceanothus	FE	CR, CRPR 1B.1	Chaparral or cismontane woodland within gabberonic soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Chlorogalum grandiflorum Red Hills soaproot	--	CRPR 1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic or serpentine soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded , saline-alkali soils at elevations below 500 feet.	**No Habitat Present.** No saline-alkali soils are present within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Clarkia biloba ssp. *brandegeeae* Brandegee's clarkia	--	CRPR 4.2	Foothill Woodland, Yellow Pine Forest, Chaparral	**Absent.** Marginally suitable habitat is present in the bue oak woodland. The species was not observed during the 2021 protocol surveys.
Crocanthemum suffrutescens Bisbee Peak rush-rose	--	CRPR 3.2	Prefers chaparral and often occurs in burned or disturbed areas on gabbronic or Ione soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	Vernal pools and other depressional wetlands.	**No Habitat Present.** No vernal pools or depressional wetands are present within the Study Area.
Fritillaria eastwoodiae Butte County fritillary	--	CRPR 3.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Fremontodendron decumbens Pine Hill flannelbush	FE	CR, CRPR 1B.2	Chaparral or cismontane woodland within rocky serpentenite or gabberonic soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Galium californicum ssp. *sierrae* El Dorado bedstraw	FE	CR, CRPR 1B.2	Chaparral, cismontane woodland, or lower montane coniferous forests within gabberonic soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Gratiola heterosepala Bogg's Lake hedge-hyssop	--	CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds.	**No Habitat Present.** No vernal pools, lakes, or ponds are present within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--	CRPR 1B.2	Edges of vernal pools and other seasonally ponded features.	**No Habitat Present.** No vernal pools or depressional wetands are present within the Study Area.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--	CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100' and 4,100' elevation.	**No Habitat Present.** No vernal pools, mesic areas, meadows, seeps, or depressional wetands are present within the Study Area.
Lasthyrus sulphureus var. *argillaceus* Dubious pea	--	CRPR 3	Occurs in cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest.	**No Habitat Present.** No cismontane woodland or coniferous forests are located within the Study Area.
Legenere limosa Legenere	--	CRPR 1B.1	Vernal pools.	**No Habitat Present.** No vernal pools are present within the Study Area.
Navarretia myersii ssp. *myersii* Pincushion navarretia	--	CRPR 1B.1	Vernal pools.	**No Habitat Present.** No vernal pools are present within the Study Area.
Orcuttia viscida Sacramento orcutt grass	FE	CE, CRPR 1B.1	Vernal pools.	**No Habitat Present.** No vernal pools are present within the Study Area. Additionally, the Study Area is outside of the known range of the species.
Packera layneae Layne's ragwort	FT	CR, CRPR 1B.2	Chaparral or cismontane woodland within rocky serpentine or gabberonic soils.	**No Habitat Present.** No serpentine or gabberonic soils located within the Study Area.
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	Emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	**No Habitat Present.** The concrete-lined irigation canal and the roadside ditches within the Study Area do not contain suitable habitat for the species.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Viburnum ellipticum Oval-leaved viburnum	--	CRPR 2B.3	Chaparral, cismontane woodland, or lower montane coniferous forests.	**No Habitat Present.** No chaparral, cismontane woodland, or lower montane coniferous forests are present within the Study Area.
Wyethia reticulata El Dorado County mule ears	--	CRPR 1B.2	Clay or gabberonic soils within chaparral, cismontane woodland, or lower montane coniferous forests.	**No Habitat Present.** No gabberonic clay soils are present within the Study Area.
Invertebrates				
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Vernal pools and other depressional wetlands.	**No Habitat Present.** No vernal pools or appropriate depressional wetlands are present within the Study Area.
Branchinecta conservatio Conservancy fairy shrimp	FE	--	Vernal pools and other depressional wetlands.	**No Habitat Present.** No vernal pools or appropriate depressional wetlands are present within the Study Area.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry *(Sambucus* species) shrubs as primary host species.	**No Habitat Present.** No elderberry shrubs are located within the Study Area or within 165-feet of the Study Area.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Vernal pools and other depressional wetlands.	**No Habitat Present.** No vernal pools or appropriate depressional wetlands are present within the Study Area.
Fish				
Hypomesus transpacificus Delta smelt	FT	CE	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though spawning has never been observed, it is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	**No Habitat Present.** No tidally influenced sloughs or drainages are present within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Oncorhynchus tshawytscha Chinook salmon (Central Valley Fall Run ESU)	--	CSC	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**No Habitat Present.** No drainages, streams, or rivers are present within the Study Area.
Oncorhynchus mykiss irideus Central Valley steelhead	FE	--	Anadromous species requiring cool freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**No Habitat Present.** No drainages, streams, or rivers are present within the Study Area.
Amphibians				
Rana draytonii California red-legged frog	FT	CSC	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	**No Habitat Present.** There is no suitable habitat for the species within the Study Area. The nearest potential habitat is within a pond approximately 300-feet west of the Study Area. However, the nearest confirmed population of the species is 30-miles northeast of the Study Area in the town of Michigan Bluff. There is an unverified occurrence of CRLF located near Folsom Lake approximately 10 miles southeast of the Study Area. This occurrence includes the sighting of a juvenile frog on a footbridge near Folsom Lake by a State Parks biologist and has not been verified by other biologists and is considered a misidentification and erronious.
Rana boylii Foothill yellow-legged frog	--	CC, CSC	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate. Found from sea level to 5,000 feet in the Sierra Nevada (Seltenrich and Pool 2002).	**No Habitat Present.** No drainages with a boulder or cobble substrate occur within the Study Area.

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Reptiles				
Actinemys marmorata Western pond turtle	--	CSC	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**No Habitat Present.** The on-site irrigation canal is concrete lined and contains fast flowing water and is not suitable habitat for the species. The nearest potential habitat is within a pond approximately 300-feet west of the Study Area. A turtle was observed wtihin this pond during a site visit in the summer of 2020. It is unlikely that western pond turtle would traverse 300 feet through dry barren uplands into the Study Area where no suitable habitat occurs.
Thamnophis gigas Giant garter snake	CT	FT	Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	**No Habitat Present.** The canal within the Study Area does not contain emergent vegetation required by the species. The Study Area is outside of the known range for the species.
Birds				
Agelaius tricolor Tricolored blackbird	--	CT, CSC	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	**No Habitat Present.** There is no suitable nesting habitat for the species within the Study Area. Additionally, the species has not been documented within 5-miles of the Study Area (CNDDB 2022).
Progne subis Purple martin	--	CSC	Nests in tall bridges and overpasses near water and open areas.	**No Habitat Present.** No tall bridges or overpasses are present within the Study Area.
Falco peregrinus anatum American peregrene falcon	Delisted	Delisted, CFP	Nests on cliffs and tall manmade structures.	**No Habitat Present.** There is no suitable neasting or foraging habitat for the species within the Study Area.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Circus cyaneus Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	**Low.** The annual brome grassland and ruderal habitat is marginal nesting and foraging habitat for this species.
Lanius ludovicianus Loggerhead shrike	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	**High.** The annual brome grasslands throughout the Study Area represent suitable foraging habitat for loggerhead shrike, and the trees and shrubs within the Study Area provide suitable nesting habitat.
Athene cunicularia Burrowing owl	--	CSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	**No Habitat Present.** No large mammal burrows or other burrowing owl refugia, such as debris piles, were observed within the Study Area. Additionally, the Study Area is just outside of the historical breeding range for the species (Shuford and Gardali 2008).
Buteo swainsoni Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**No Habitat Present.** The annual grassland within the Study Area is fragmented and too small to provide suitable foraging habitat for Swainson's hawk. The species has not been documented within 5-miles of the Study Area (CNDDB 2022). The nearest Swainson's hawk nests are located approximately 5.5 miles southwest and approximately 7 miles west of the Study Area (Brown Pers. Comm.)., however these occurrences represent the far eastern extent of the species within south Placer County. Thus it is believed that the Study Area is outside of the known nesting range of the species.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Pandion haliaetus Osprey	--	WL	Nesta in large trees, snags, and dead-topped trees in open forest habitats near waterbodies with fish.	**No Habitat Present.** There is no suitable neasting or foraging habitat for the species within the Study Area.
Elanus leucurus White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Present.** The open areas throughout the Study Area represent suitable foraging habitat for white-tailed kite, and the trees throughout the Study Area provide suitable nesting habitat. The species was observed foraging within the Study Area.
Laterallus jamaicensis coturniculus California black rail	--	CT	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	**No Habitat Present.** The aquatic resources within the Study Area do not provide suitable dense emergent marsh vegetation required by the species.
Mammals				
Antrozous pallidus Pallid bat	--	CSC, WBWG H	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (WBWG 2018).	**No Habitat Present.** No suitable roosting habitat was identified within the Study Area.
Corynorhinus townsendii townsendii Townsend's big-eared bat	--	CC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance. (WBWG 2018).	**No Habitat Present.** No caves or cave analogues present on-site.

Scientific Name **(Common Name)**	**Federal Status**	**State Status**	**Habitat Requirements**	**Potential for Occurrence**
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features.	**No Habitat Present.** No suitable roosting habitat was identified within the Study Area.
Lasiurus blossevillii Western red bat	--	CSC, WBWG H	Roosts primarily in the foliage of trees or shrubs (WBWG 2020). Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (WBWG 2020).	**No Habitat Present.** No suitable roosting habitat was identified within the Study Area.
Lasiurus cinereus Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings (WBWG 2018).	**No Habitat Present.** No suitable roosting habitat was identified within the Study Area.

Status Codes:

CC - CDFW Candidate for Listing
CE - CDFW Endangered
CFP - CDFW Fully Protected
CRPR - California Rare Plant Rank
CSC - CDFW Species of Concern
CR - California Rare
CT - CDFW Threatened
FE - Federally Endangered
FT - Federally Threatened
WL - CDFW Watch List
WBWG M - Western Bat Working Group Medium Threat Rank
WBWG H - Western Bat Working Group High Threat Rank

5.1 Plants

Protocol-level special-status plant surveys were conducted by Madrone biologist Dustin Brown on 16 April 2021 (Madrone 2021b) in accordance with the U.S. Fish and Wildlife Service's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 1996), California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018), and the *CNPS Botanical Survey Guidelines* (CNPS 2001). The survey was timed at the appropriate period to observe special-status species that have the potential to be located within the Study Area. No special-status plant species were observed during the survey.

5.2 Birds

5.2.1 Northern Harrier

The northern harrier *(Circus cyaneus)* is not listed pursuant to either the California or federal Endangered Species Acts; however, it is considered to be a species of special concern by the CDFW. This species is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California (Shuford and Gardali 2008). The northern harrier is a ground nesting species that typically nests in emergent wetland/marsh, open grasslands, or savanna habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands (Shuford and Gardali 2008).

The annual brome grassland and ruderal habitat represent marginal nesting and foraging habitat for the species. There is a low potential for northern harrier to be present within the Study Area. Northern harrier has not been documented in the CNDDB within 5 miles of the Study Area (CNDDB 2021).

5.2.2 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but it is a CDFW fully protected species. This species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannas, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savanna habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

The annual grassland within the Study Area represents foraging habitat for white-tailed kite, and the trees within the Study Area provide suitable nesting habitat. This species was observed foraging in the Study Area during a field survey. The nearest documented occurrence of a white-tailed kite nest is located approximately 2.5 miles north of the Study Area (CNDDB 2021).

5.2.3 Loggerhead Shrike

The loggerhead shrike *(Lanius ludovicianus)* is not listed and protected pursuant to either the California or federal Endangered Species Acts; but is a CDFW species of special concern. Loggerhead shrikes nest in small

trees and shrubs in woodland and savannah vegetation communities, and forage in open habitats throughout California (Shuford and Gardali 2008). The nesting season ranges from March through June.

The trees and annual brome grassland within the Study Area provide suitable habitat for loggerhead shrike. Loggerhead shrike has not been documented in the CNDDB within 5 miles of the Study Area (CNDDB 2021).

6.0 WILDLIFE MOVEMENT/CORRIDORS

The Study Area currently provides an area of open space connecting largely undeveloped, natural land to the east and west of the Study Area. The Study Area may be used by common terrestrial and semi-aquatic species as a wildlife movement corridor.

7.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project as currently planned, as discussed in **Section 1.1** and shown in **Attachment A**. It is anticipated that minor changes in Project design/footprint may occur (within the Study Area) as a variety of permits and other approvals are sought from the County.

7.1 Terrestrial Land Cover Types

A total of approximately 13.7 acres of terrestrial land cover types will be impacted by the proposed Project (**Figure 7**) as currently planned. Refer to **Table 5** below for a breakdown of the avoided and impacted land cover types.

Table 5. Impacts and Avoidance of Terrestrial Land Cover Types within the Study Area

Land Cover Type	Impact Acreage	Avoidance Acreage	Total Acreage
Natural Communities			
Blue Oak Woodland	4.2	2.0	6.2
Annual Brome Grassland	1.7	0.9	2.6
Interior Live Oak Woodland	0.0	<0.1	<0.1
Mixed Oak Woodland	<0.1	0.1	0.1
Non-Natural Communities			
Barren	7.8	1.4	9.2
Urban Woodland	<0.1	0.1	0.1
Total	**13.7**	**4.4**	**18.1**

7.2 Aquatic Resources

Of the 0.099 acre of aquatic resources mapped within the Study Area, 0.006 acre will be impacted by the Project in the widening of Callison Road (**Table 6** and **Figure 7**). Madrone suggests that the aquatic resources delineation be submitted to the USACE with a request for a jurisdictional determination prior to any impacts to determine whether a Clean Water Act permit is necessary.

Jurisdiction will be determined in consultation with the USACE and the RWQCB, and appropriate Clean Water Act permits will be obtained if necessary. The irrigation canal and the roadside ditch may be considered jurisdictional to CDFW Code Section 1600 and may require a Lake or Streambed Alteration Agreement (agreement) from CDFW.

Table 6. Impacts and Avoidance of Aquatic Resources within the Study Area

Aquatic Resource Type	Impact Acreage	Avoidance Acreage	Total Acreage
Irrigation Canal	0.000*	0.093	0.093
Roadside Ditch (riverine)	0.006	0.000	0.006
Total	**0.006**	**0.093**	**0.099**

* The landowner, in conjunction with the Placer County Water Agency is planning to encase this canal within the Project area prior to the commencement of construction of the Project.

7.3 Nesting Raptors and Songbirds

Northern harrier, loggerhead shrike, and white-tailed kite have the potential to nest within the Study Area, as do other more common bird species protected by the MBTA. If any of these species were nesting on-site, removal of the nests would impact these species (including mortality). Furthermore, birds nesting in avoided areas adjacent to construction could be disturbed by construction, which could result in nest abandonment.

7.4 Native Oak Trees and Oak Woodlands

Of the 331 Protected Trees present within the Study Area, a total of 215 Protected Trees that have a combined DBH of 3,136 inches will be impacted by the Project. The remaining 116 Protected Trees will not be impacted by the Project. Of the 215 Protected trees to be impacted, 165 have major or extreme structural and/or health problems. The remaining 50 Protected Trees are in fair or good condition and total 668 inches DBH. Of the 50 Protected Trees, there are four that are greater than 24 inches in diameter and are considered "significant trees" to be removed. They include tree 6963, a 26-inch DBH interior live oak, tree 9354, a 31-inch DBH blue oak, tree 6964, a 27-inch DBH California black oak, and tree 5218, a 24-inch blue oak. The Project is participating in the PCCP and will pay land conversion fees to mitigate for impacts to individual oak trees.

A combined total of 4.2 acres of oak woodland will be impacted by the project. To mitigate for the loss to oak trees and oak woodland the Project proponent will mitigate for the impacts to 4.2 acres of impacts to oak woodland by paying the associated PCCP Land Cover conversion fees.

8.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

The following are mitigation measures for impacts to sensitive biological resources that are commonly employed by CEQA lead agencies and by the PCCP.

8.1 General Measures

These measures are for projects that disturbs more than one acre of soil.

8.1.1 General Condition 1 - Watershed Hydrology and Water Quality

Prior to Improvement Plan approval, the project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ); including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP); and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual).
The project shall implement the following BMPs. This list shall be included on the Notes page of the improvement/grading plans and shall be shown on the plans:

1. When possible, vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site will be recovered to pre-project or ecologically improved conditions within 1 year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).
2. Trash generated by Covered Activities will be promptly and properly removed from the site.
3. Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) will be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.
    a. Erosion control measures will be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets will be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.
    b. Erosion control measures will be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.
    c. Fiber rolls used for erosion control will be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.
    d. Seed mixtures applied for erosion control will not contain California Invasive Plant Council–designated invasive species (http://www.cal-ipc.org/paf/) but will be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.

4. If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.

8.1.2 General Condition 3 – Land Conversion

The project will result in a permanent land cover conversion from natural communities to urbanized communities. The project shall pay a land conversion fee of $10,837 per acre or $63,938.30 (estimate only) for the permanent conversion of approximately 5.9 acres of natural land cover including 4.2 acres of oak woodland and 1.7 acres of annual brome grassland. The fees to be paid shall be those in effect at the time of ground disturbance authorization for each project step and shall be the per acre fee based on the amount of land disturbance resulting from the activity. No Special Habitat Types will be impacted by the Project.

Fees were estimated based upon the footprint of the Project and not the total Property. We believe that this Project qualifies as low density rural development as defined in paragraph two of Section 6.3.1.3.2 of the PCCP and land conversion fees will only apply to the Project area footprint.

This fee estimate is based on the landcover mapping completed at the time of the biological surveys conducted for the Study Area. It should be noted that the PCCP uses a 2011 "Baseline" map for assessing landcover fees due, and some of the areas mapped as "Barren" may have consisted of a natural community type that requires fee payment if they were converted to barren post-2011. PCCP landcover mapping and fees due will be assessed at the time a PCCP application is submitted and processed.

8.1.3 General Condition 5 – Conduct Worker Training

Prior to initiation of construction activities, all project construction personnel shall participate in a worker environmental training program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work.

8.2 Natural Community-Specific Measures

8.2.1 Community Condition 1.2 – Avoidance of Aquatic/Wetland Complex

After receiving a PCCP Certificate of Authorization and prior to construction, the project shall retain a qualified professional to temporarily stake non-vernal pool wetlands and their buffer that will be avoided to ensure construction equipment and personnel completely avoid these features. A note to this effect shall be shown on the projects (improvement plans or grading plans) and the location of temporary fencing demonstrated on the plans. Once installed, the applicant shall notify the PCA and the County of the

temporary fencing and provide photographs as evidence of the installation. The fencing shall remain in place for the duration of ground-disturbing activities.

8.2.2 Community Condition 2.1 – Riparian Avoidance and Minimization

The project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The (improvement or grading plans) shall show the location of the riverine or riparian buffers.

8.3 CARP Authorization Conditions

All work within the Plan Area that impacts Aquatic Resources of Placer County shall be completed according to the plans and documents included in the CARP application, Water Quality Certification, USACE CWA Section 404 Permit (if applicable), and, if applicable, WDRs. All changes to those plans shall be reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, WDRs. Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required.

A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available onsite at all times for review by site personnel and agencies.

Any construction within the Stream System shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other Aquatic Resources of Placer County, and the Stream Zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.

Before beginning construction, the project Applicant must have a valid CARP authorization or waiver notice. In order to obtain a permit, the Applicant must pay all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank.

All deviations from plans and documents provided with the Application and approved by Placer County CDRA must be reported to Placer County CDRA immediately.

Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.

All required setbacks shall be implemented according to the HCP/NCCP Condition 4 (HCP/NCCP Section 6.1.2).

Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1 prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at Placer County CDRA's discretion and will require surveys by a qualified biologist to determine the absence of nesting birds prior to the activity.

Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. These materials shall be placed a minimum of 50 feet away from aquatic environments. All discharges, unintentional or otherwise, shall be reported immediately to Placer County CDRA. Placer County CDRA shall then immediately notify the appropriate state and federal agencies.

During construction, no litter or construction debris shall be dumped into water bodies or other aquatic resources; nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.

Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that may be used in the project area shall be submitted to Placer County CDRA before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity.

Placer County CDRA shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. Placer County CDRA shall suspend work and notify the USFWS, NMFS, and the CDFW for guidance.

Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.

All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.

At the end of each workday, all open trenches will be provided with a ramp of dirt or wood to allow trapped animals to escape.

If human remains or cultural artifacts are discovered during construction, the Applicant shall stop work in the area and notify Placer County CDRA immediately. Work will not continue in the area until the County coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.

8.4 California Department of Fish and Wildlife Streambed Alteration Agreement

The Antelope Canal and roadside ditch may be considered jurisdictional under CDFW Code Section 1600. The only way to determine whether these features are jurisdictional under CDFW Code Section 1600 is to submit a Streambed Alteration Agreement Notification (Notification) to CDFW. Submittal of Notification would either result in a letter from CDFW stating no Agreement is required, or issuance of an Agreement.

The applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for any impacts to aquatic features with a bed and/or bank, or riparian habitat associated with a CDFW-jurisdictional aquatic resource. The information provided will include a description of all of the activities associated with the Project, not just those closely associated with the drainages and/or riparian vegetation. Impacts for each activity will be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts will be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from Project implementation will be provided as well as a description of storm water treatment methods. Minimization and avoidance measures will be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. Mitigation may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW.

8.5 Nesting Raptors and Other Birds

The following nest survey requirements apply if construction activities take place during the typical bird breeding/nesting season (typically February 15 through September 1).

A pre-construction nesting bird survey shall be conducted by a qualified biologist on the project site and within a 500-foot radius of proposed construction areas, where access is available, no more than three (3) days prior to the initiation of construction. If there is a break in construction activity of more than two (2) weeks then subsequent surveys shall be conducted.

If active raptor nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller buffer is proposed by the Project Biologist and approved by Placer County after taking into consideration the natural history of the species of nesting bird, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (if there are visual or acoustic barriers between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged and are independent of the site, or the nest can be left undisturbed until the end of the nesting season.

A report summarizing the survey(s) shall be provided to Placer County within 30 days of the completed survey, and is valid for one construction season. If no nests are found, no further mitigation is required.

Should construction activities cause a nesting bird to exhibit any signs of distress (vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest), then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop this agitated behavior. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the buffer zone after a follow-up survey by the Project Biologist has been conducted and a report has been prepared indicating that the nest (or nests) are no longer active, and that no new nests have been identified.

9.0 REFERENCES

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Figures

Figure 1. Site and Vicinity

Figure 2. California Natural Diversity Database Occurrences of Special-Status Species

Figure 3. Aquatic Resources

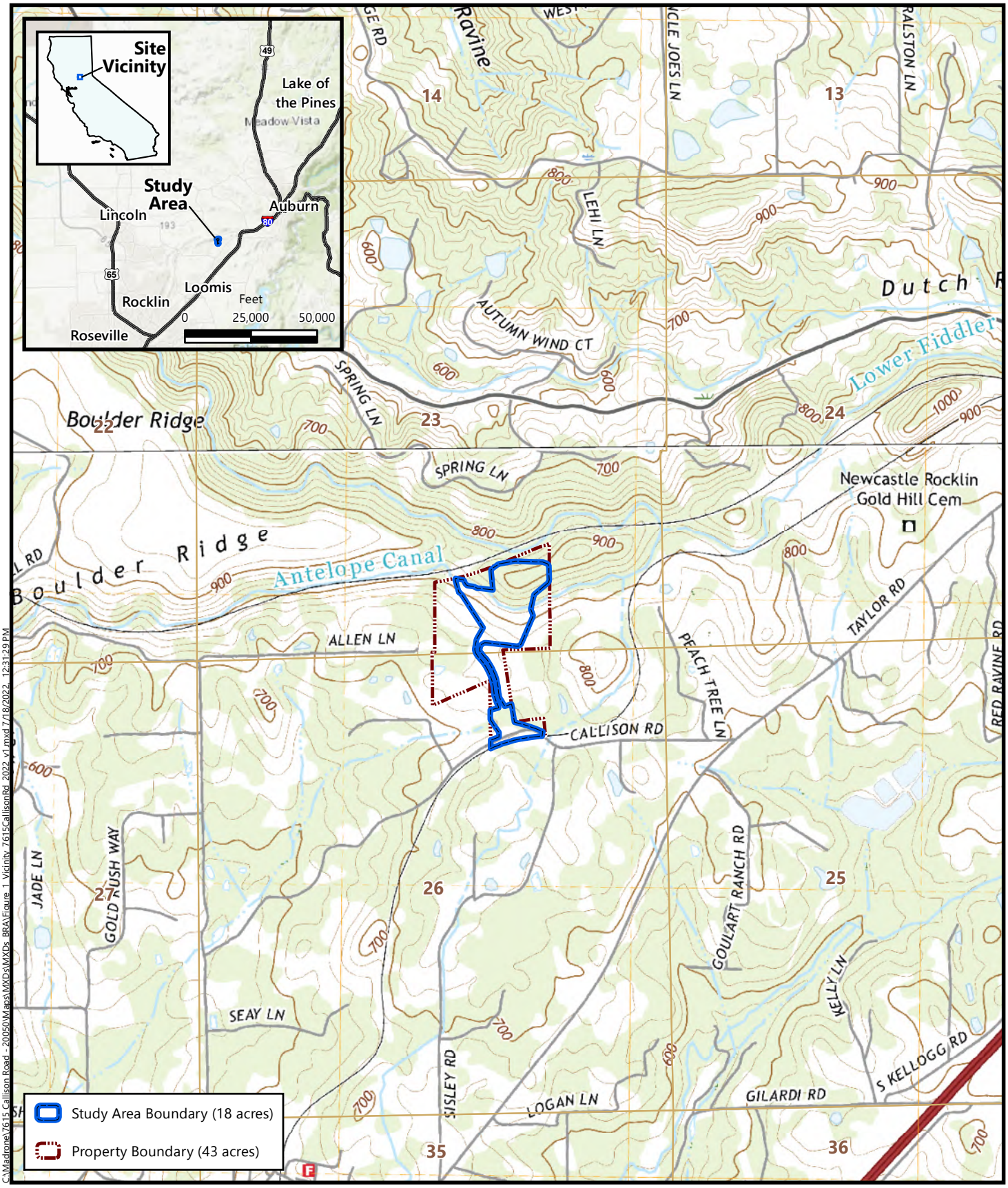
Figure 4. NRCS Soils Map

Figure 5. Land Cover Types

Figure 6. Tree Locations

Figure 7. Impacts to Aquatic Resources and Land Cover Types

Figure 8. Impacts to Trees



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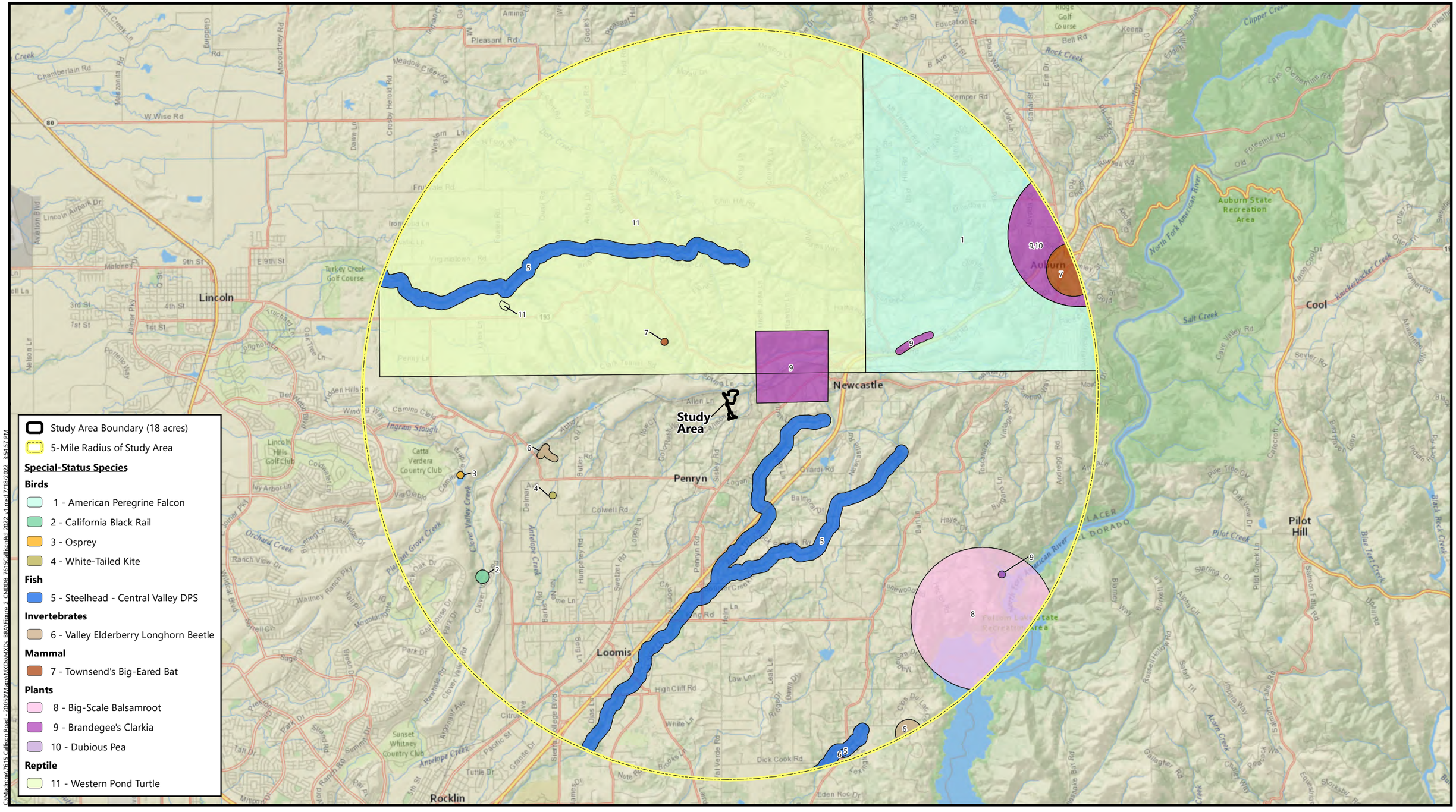
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Source: United States Geologic Survey, 2021.
Sections 23 and 26, Township 12 North, Range 7 East, MDB&M
"Rocklin, California" 7.5-Minute Topographic Quadrangle
Longitude -121.160893, Latitude 38.869006

Figure 1
Site and Vicinity

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING


Study Area Boundary (18 acres)
5-Mile Radius of Study Area
Special-Status Species
Birds
1 - American Peregrine Falcon
2 - California Black Rail
3 - Osprey
4 - White-Tailed Kite
Fish
5 - Steelhead - Central Valley DPS
Invertebrates
6 - Valley Elderberry Longhorn Beetle
Mammal
7 - Townsend's Big-Eared Bat
Plants
8 - Big-Scale Balsamroot
9 - Brandegee's Clarkia
10 - Dubious Pea
Reptile
11 - Western Pond Turtle
Study Area
Lincoln
Rocklin
Loomis
Penryn
Newcastle
Auburn
Cool
Pilot Hill
Auburn State Recreation Area
Folsom Lake State Recreation Area
Turkey Creek Golf Course
Lincoln Hills Golf Club
Catta Verdera Country Club
Sunset Whitney Country Club
Ridge Golf Course
W Wise Rd
Pleasant Rd
Bell Rd
Rock Creek
Clipper Creek
Lake Clementine Rd
Foresthill Rd
Old Foresthill Rd
North Fork American River
Salt Creek
Cave Valley Rd
Sevier Rd
Knickerbocker Creek
Aaron Cool Dr
Crammer Rd
Lincoln Airport Dr
Aviation Blvd
Maloney
9th St
E 9th St
3rd St
4th St
1st St
O St
Joiner Pky
Nelson Ln
Portello Way
Oak Tree Ln
Del Webb Blvd
Camino Cielo
Ingram Slough
Catta Verdera Country Club
Ivy Arbor Ln
Cobblestone Ln
Via Diablo
Orchard Creek
Ranch View Dr
Whitney Ranch Pky
Wildcat Blvd
Sunset Blvd
Mountaingate Dr
Park Dr
Sage Dr
Green Dr
Fawnridge Dr
Argonaut Ave
Citrus Ave
Pacific St
Granite Dr
Sierra College Blvd
Taft Dr
Strand Rd
Summit Dr
Lord Ranch Rd
Oak Pl
5th St
Tuttle Dr
Antelope Creek
Clover Valley Creek
Plant Grove Creek
Oak Dr
Clubhouse Dr
Clover Valley Rd
Antelope Creek
Barker Rd
Humphrey Rd
Swetzer Rd
Lopez Ln
Penryn Rd
Sisley Rd
Newcastle
Gilardi Rd
Colwell Rd
Logan
Delmar Ave
Butler Rd
Cole Creek
Spring Ln
Allen Ln
Camino Cielo
Ingram Slough
Penryn Rd
Loomis
Taylor Rd
Horseshoe Bar Rd
Barrett Rd
Humphrey Rd
Swetzer Rd
Lopez Ln
Penryn Rd
Sisley Rd



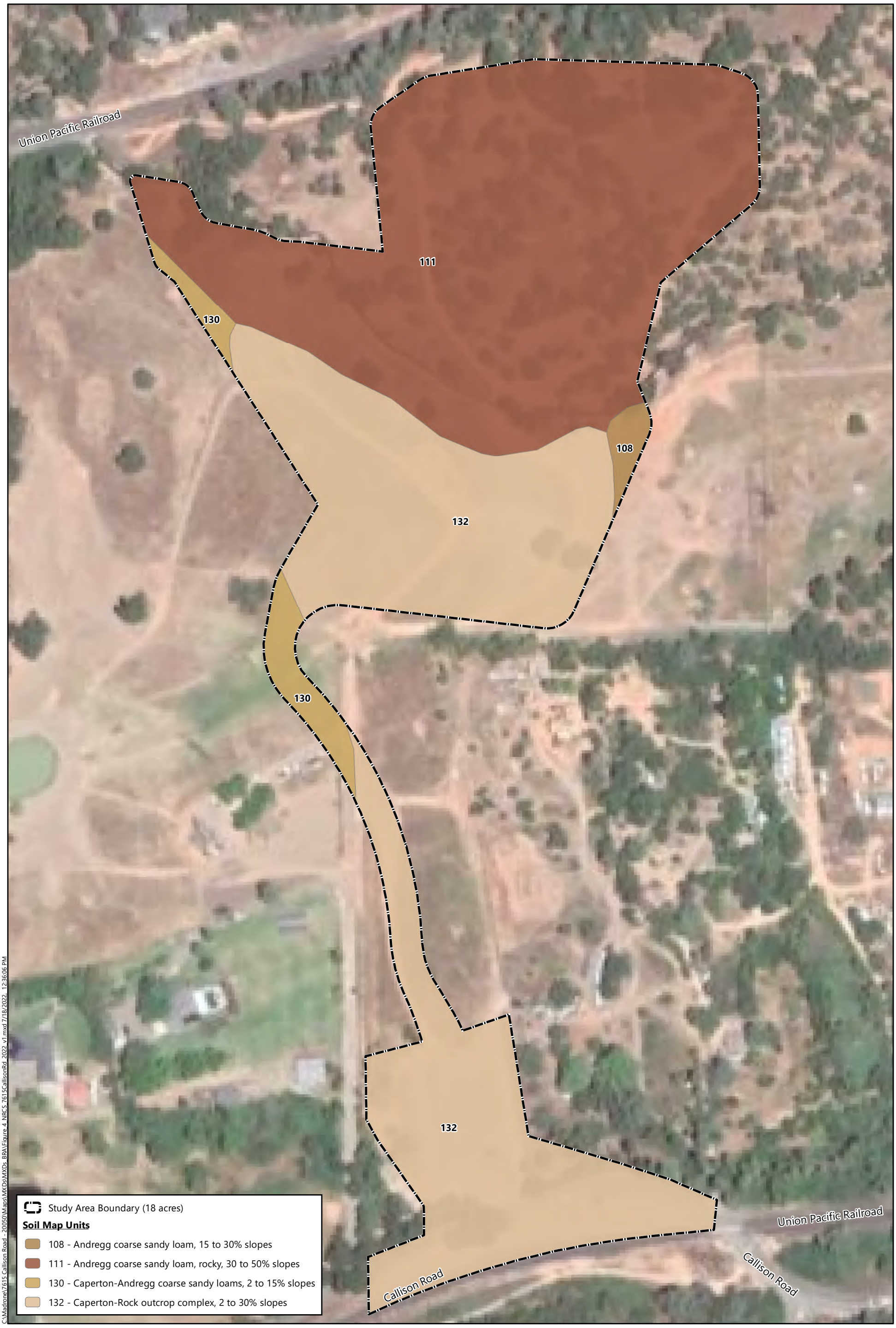
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Aerial Source: Maxar, 17 June 2020

Figure 3
Aquatic Resources

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING



N

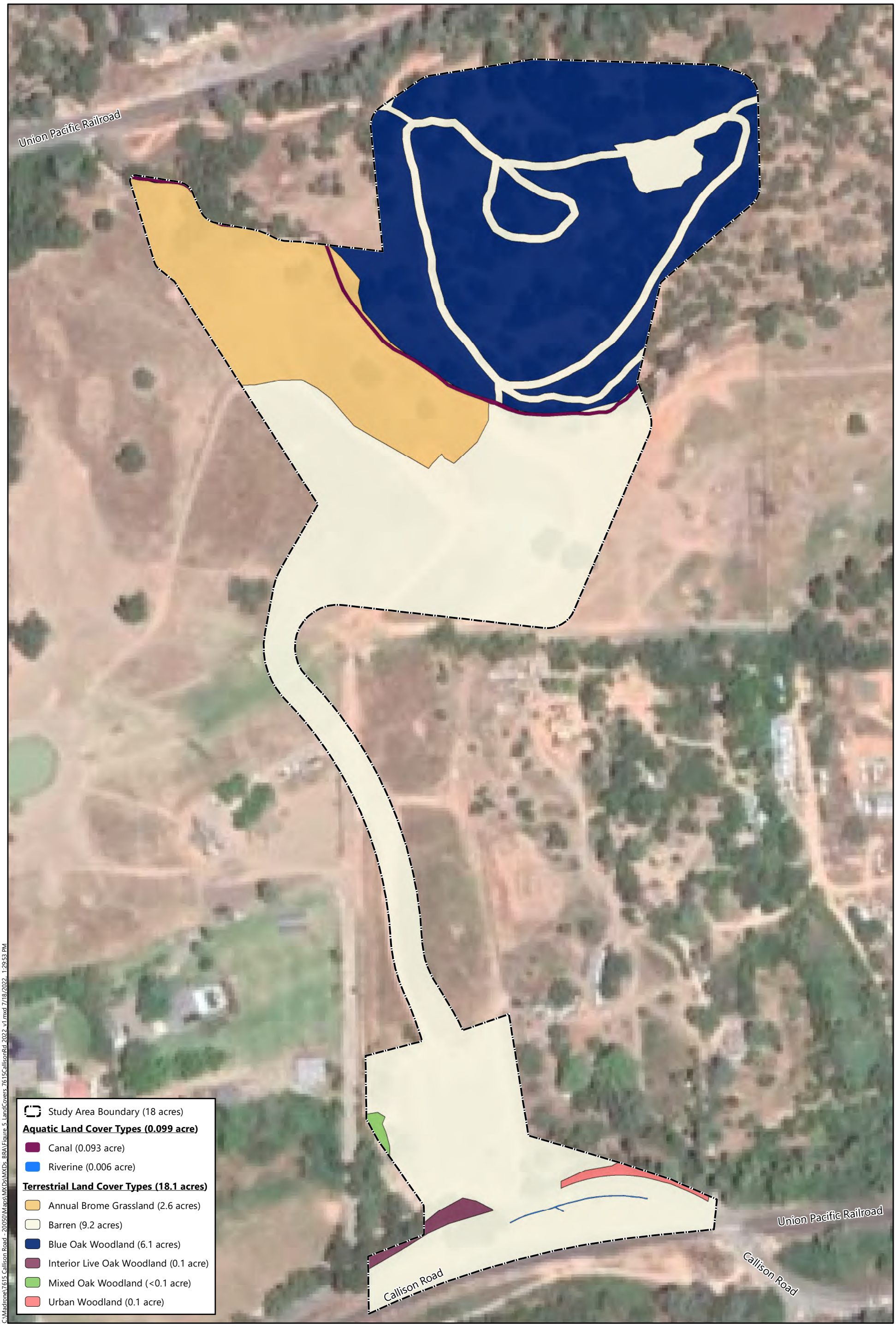
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0 75 150

Soil Survey Source: *USDA, Soil Conservation Service.*
Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part
Aerial Source: Maxar, 17 June 2020

Figure 4
Natural Resources Conservation Service Soils

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING



C:\Madrone\7615 Callison Road - 20050\Maps\MXDs\MXDs BRA\Figure 5 LandCovers 7615CallisonRd 2022 v1.mxd 7/18/2022, 1:29:53 PM

Aerial Source: Maxar, 17 June 2020

Figure 5
Land Cover Types

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

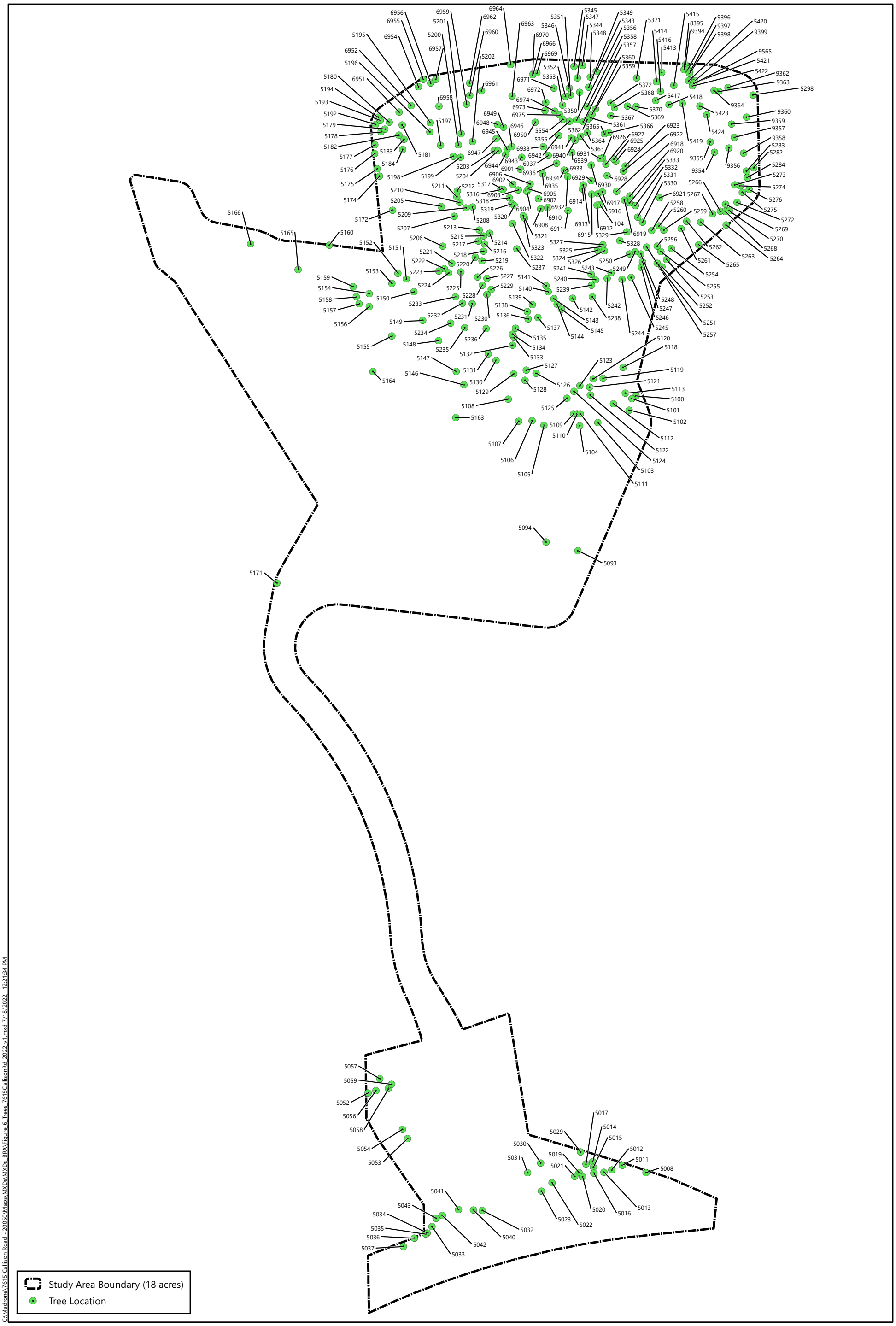


Figure 6
Tree Locations

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

Tree Location Source: California Tree and Landscape Consulting, Inc. 2020.
Oak Resources Technical Report for 7615 Callison Road.

C:\Madrone\7615 Callison Road - 20050\Maps\MXDs\MXDs_BRA\Figure_6_Trees_7615CallisonRd_2022_v1.mxd 7/18/2022 12:21:34 PM

Union Pacific Railroad

Impacts to Land Cover Types			
Land Cover Type	**Impacted (acres)**	**Avoided (acres)**	**Total Acreage**
Aquatic Land Cover Types			
Canal	0.000*	0.093	0.093
Riverine	0.006	0.000	0.006
Total Aquatic Resources:	**0.006**	**0.093**	**0.099**
Terrestrial Land Cover Types			
Annual Grassland	1.7	0.9	2.6
Barren	7.8	1.4	9.2
Blue Oak Woodland	4.2	2.0	6.2
Interior Live Oak Woodland	0.0	<0.1	0.0
Mixed Oak Woodland	<0.1	<0.1	0.0
Urban Woodland	<0.1	0.1	0.1
Total Terrestrial Land Cover Types:	**13.7**	**4.4**	**18.1**

Notes: Small summation errors may occur due to rounding.
*The landowner, in conjunction with the Placer County Water Agency is planning to encase this canal within the Project area prior to the commencement of construction of the Project.

Impacted (13.9 acres)
Study Area Boundary (18 acres)

Aquatic Land Cover Types (0.099 acre)

Canal (0.093 acre)
Riverine (0.006 acre)

Terrestrial Land Cover Types (18.1 acres)

Annual Brome Grassland (2.6 acres)
Barren (9.2 acres)
Blue Oak Woodland (6.1 acres)
Interior Live Oak Woodland (0.1 acre)
Mixed Oak Woodland (<0.1 acre)
Urban Woodland (0.1 acre)

Union Pacific Railroad

Callison Road

Callison Road

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Feet
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Aerial Source: Maxar, 17 June 2020

Figure 7
Impacts to Land Cover Types

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

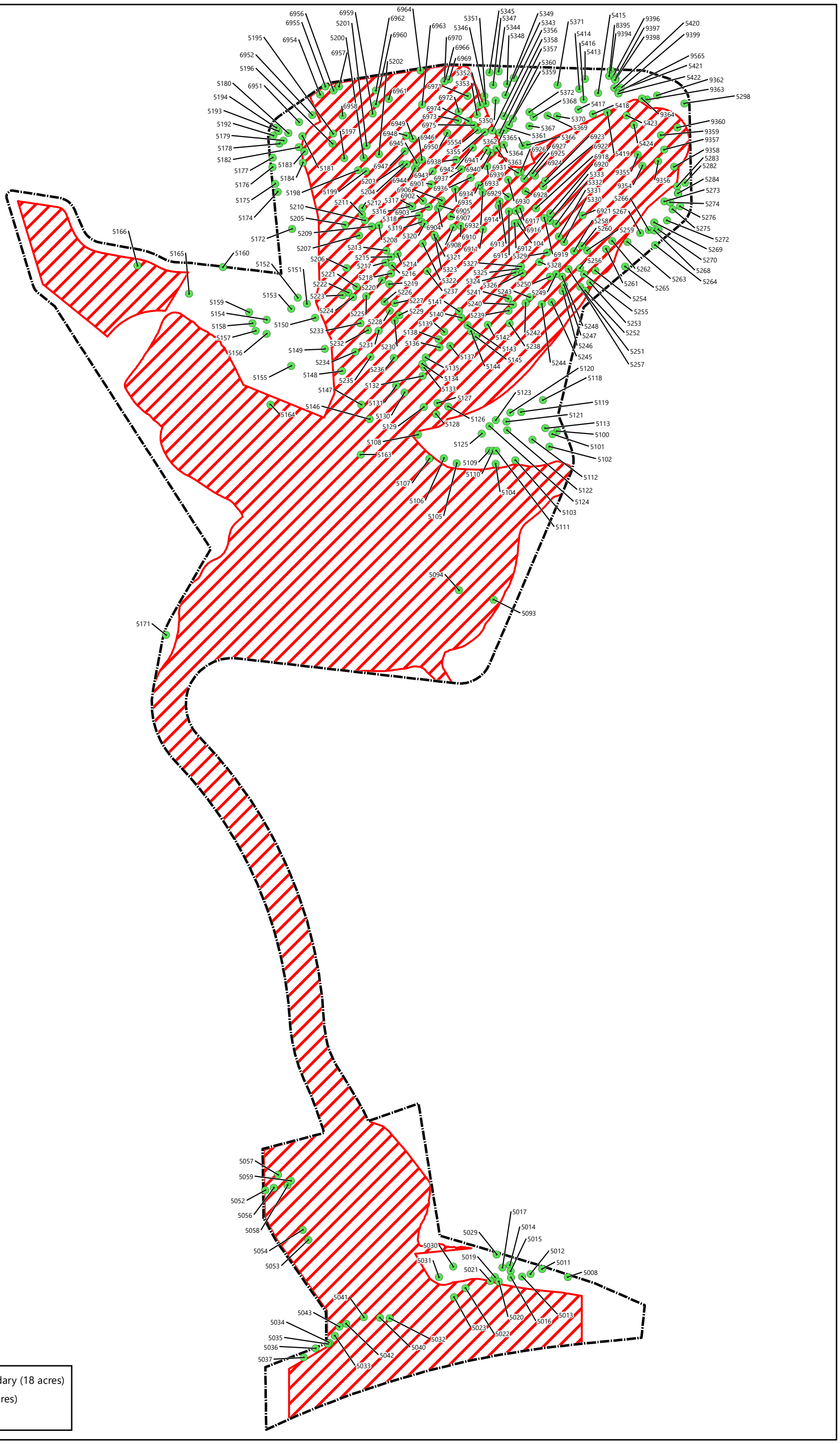


Figure 8
Impacts to Trees

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

Tree Location Source: California Tree and Landscape Consulting, Inc. 2020.
Oak Resources Technical Report for 7615 Callison Road.

C:\Madrone\7615 Callison Road - 20050\Maps\MXDs\MXDs_BRA\Figure_8_Impacts_Trees_7615CallisonRd_2022_v2.mxd 7/20/2022, 11:29:57 AM

Attachments

Attachment A. Conceptual Site Plan

Attachment B. IPaC Trust Resource Report for the Study Area

Attachment C. CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

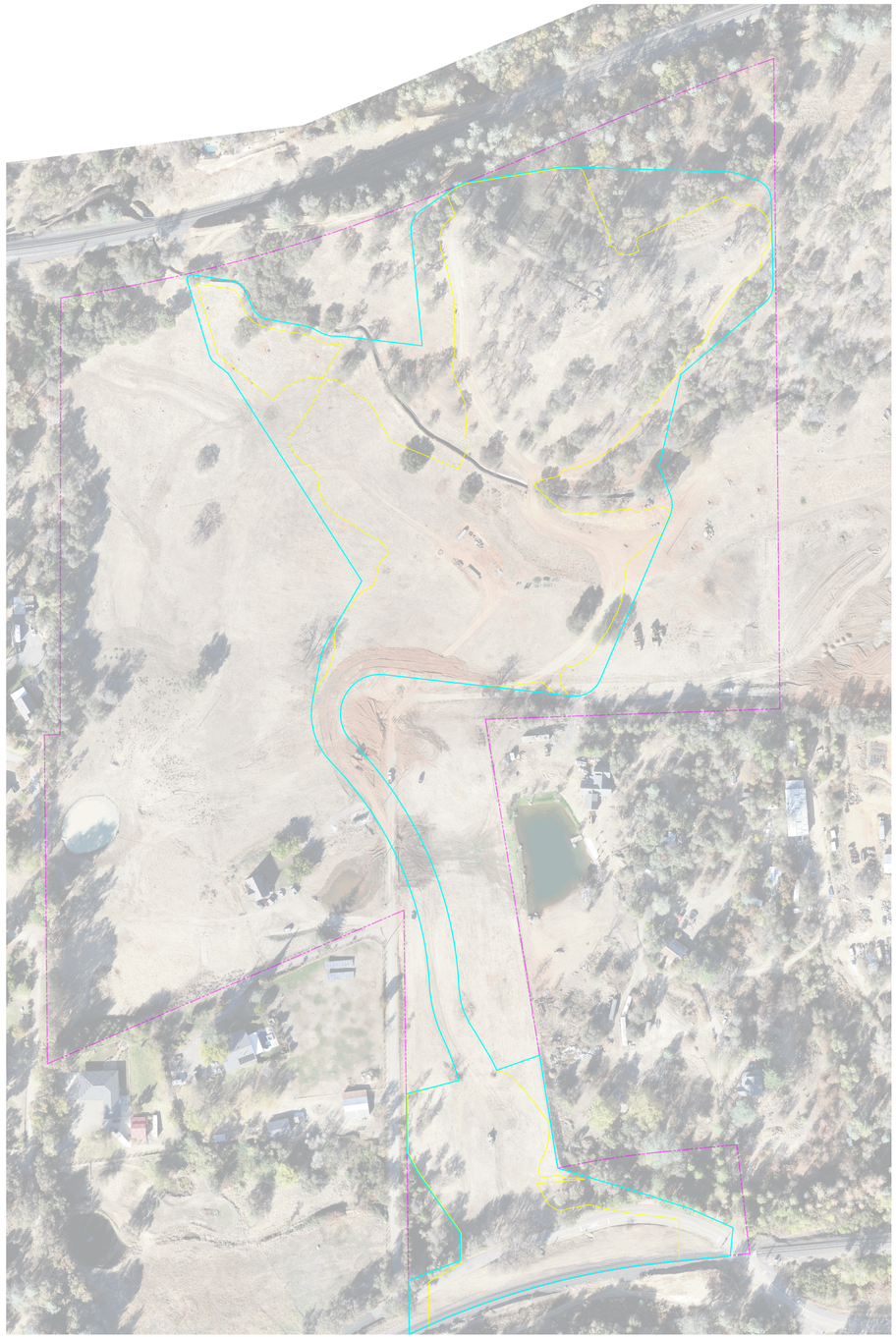
Attachment D. Wildlife List

Attachment E. Full Property Land Cover Map

Attachment F. Tree Inventory Data

Attachment A

Conceptual Site Plan



LEGEND

- PROPERTY LINES
- PROJECT BOUNDARY
- IMPACT AREA

01 **SITE PLAN**
3/32" = 1'-0"

NORTH

Building Engineering & Maintenance
1025 Creekside Ridge Dr, Ste 200
Roseville, CA 95678
TEL: (916) 315-8877

REVISIONS		
REV	DATE	DESCRIPTION

PROJECT:

UNDERGROUNDING
AT&T LINES

PROJECT ADDRESS:

7615 CALLISON RD
PENRYN, CA 95663

DRAWING TITLE:

PROJECT 8
PARCEL BASEMAP

PROJECT #:

-

SCALE:

3/32" = 1'0"

DATE:

7/20/2022

DESIGNED BY:

N/A

DRAWN BY:

T. TULL

CHECKED BY:

N/A

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

-

Attachment B

IPaC Trust Resource Report for the Study Area

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2022-0065441
Project Name: 7615 Callison Road

July 19, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2022-0065441
Event Code: None
Project Name: 7615 Callison Road
Project Type: New Constr - Above Ground
Project Description: Vineyard and Tasting Facility
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.86886653784747,-121.16154700008212,14z



Counties: Placer County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Reptiles

NAME	STATUS
Giant Garter Snake *Thamnophis gigas*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4482

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/321

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Madrone Ecological Consulting
Name: Dustin Brown
Address: 8421 Auburn Boulevard, Suite 248
City: Citrus Heights
State: CA
Zip: 95610
Email dbrown@madroneeco.com
Phone: 9168223230

Attachment C

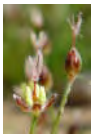
CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

Search Results

23 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B:3**] , 9-Quad include [**3812181:3812162:3812161:3812163:3812173:3812171:3812172:3812183:3812182**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	None	None	G2	S2	1B.2	 © 2019 Steven Perry
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	 ©1998 Dean Wm. Taylor
Calystegia stebbinsii	Stebbins' morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	FE	CE	G1	S1	1B.1	No Photo Available
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	No Photo Available
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	FE	CR	G1	S1	1B.1	No Photo Available
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	None	None	G3	S3	1B.2	No Photo Available
Chloropyron molle ssp. *hispidum*	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	G2T1	S1	1B.1	No Photo Available
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	None	None	G2?Q	S2?	3.2	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2	No Photo Available
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	FE	CR	G1	S1	1B.2	No Photo Available
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3Q	S3	3.2	 ©2009 Sierra

										Pacific Industries
Galium californicum ssp. *sierrae*	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	FE	CR	G5T1	S1	1B.2	 © 2019 John Doyen
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2	 ©2004 Carol W. Witham
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	 © 2004 Carol W. Witham
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	None	None	G2T2	S2	1B.1	 ©2016 Dylan Neubauer
Lathyrus sulphureus var. *argillaceus*	dubious pea	Fabaceae	perennial herb	Apr-May	None	None	G5T1T2Q	S1S2	3	No Photo Available
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	 ©2000 John Game
Navarretia myersii ssp. *myersii*	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	 © 2020 Leigh Johnson
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	FE	CE	G1	S1	1B.1	No Photo Available
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	FT	CR	G2	S2	1B.2	No Photo Available

Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	 ©2013 Debra L. Cook
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3?	2B.3	 © 2006 Tom Engstrom
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	No Photo Available

Showing 1 to 23 of 23 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 19 July 2022].

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Attachment D

Wildlife List

Wildlife Species Observed within the
7615 Callison Road Study Area
30 June, 1 July, and 31 December 2020

Species Name	Common name
Birds	
Anthus rubescens	American pipit
Aphelocoma californica	California scrub jay
Baeolophus inornatus	Oak titmouse
Branta canadensis	Canada goose
Bubo virginianus	Great horned owl
Buteo jamaicensis	Red-tailed hawk
Buteo lineatus	Red-shouldered hawk
Butorides virescens	Green heron
Callipepla californica	California quail
Calypte anna	Anna's hummingbird
Cathartes aura	Turkey vulture
Charadrius vociferus	Killdeer
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Dryobates nuttallii	Nuttall's woodpecker
Haemorhous mexicanus	House finch
Hirundo rustica	Barn swallow
Icterus bullockii	Bullock's oriole
Melanerpes formicivorus	Acorn woodpecker
Meleagris gallopavo	Wild turkey
Melospiza melodia	Song sparrow
Mimus polyglottos	Northern mockingbird
Passerculus sandwichensis	Savannah sparrow
Petrochelidon pyrrhonota	Cliff swallow
Pipilo maculatus	Spotted towhee
Sayornis nigricans	Black phoebe
Sialia mexicana	Western bluebird
Sitta carolinensis	White-breasted nuthatch
Spinus psaltria	Lesser goldfinch
Sturnus vulgaris	European starling
Tachycineta bicolor	Tree swallow
Turdus migratorius	American robin
Tyrannus verticalis	Western kingbird
Zenaida macroura	Mourning dove

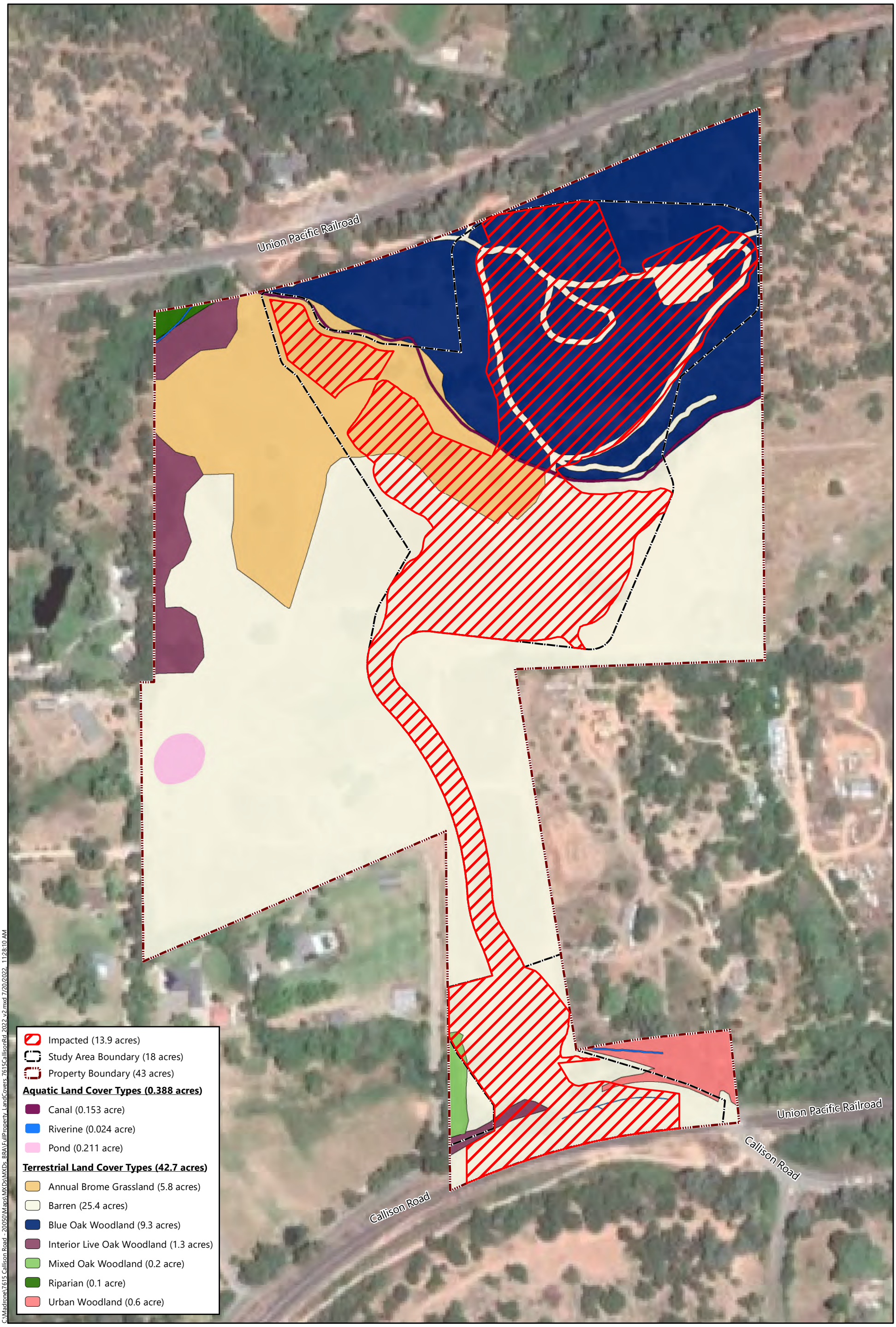
Wildlife Species Observed within the
7615 Callison Road Study Area
30 June, 1 July, and 31 December 2020

Species Name	Common name
Mammals	
Sciurus griseus	Western gray squirrel
Sylvilagus audubonii	Desert cottontail
Reptiles	
Actinemys marmorata	Western pond turtle[1]
Crotalus oreganus	Western rattlesnake
Sceloporus occidentalis	Western fence lizard
Amphibians	
Lithobates catesbeianus	American bullfrog

[1] Observed within pond approximately 300-feet west of the Study Area

Attachment E

Full Property Land Cover Map



N

Feet

0 95 190

Aerial Source: Maxar, 17 June 2020

Land Cover Types Within Property Boundary

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

Attachment F

Tree Inventory Data

Tag Number	Longitude	Latitude	Remove	Scientific Name	Common Name	Native	DBH	Canopy Radius (ft)	Arborist Rating	Notes	Multi-Stem DBH
104	-121.1600418	38.87081021	X	*Quercus douglasii*	Blue oak	Yes	5.8	10	3	Fair - Minor Problems	
5008	-121.1598199	38.86630265		*Pinus ponderosa*	Ponderosa pine	Yes	26.0	20	2	Major Structure or Health Problems	
5011	-121.1599622	38.86633732		*Quercus wislizeni*	Interior live oak	Yes	19.0	30	2	Major Structure or Health Problems	10,9
5012	-121.1600243	38.86631726		*Sequoia sempervirens*	Coast redwood	No	22.0	18	3	Fair - Minor Problems	
5013	-121.1600713	38.86630598		*Calocedrus decurrens*	Incense cedar	Yes	8.0	5	2	Major Structure or Health Problems	
5014	-121.1601367	38.86635468		*Calocedrus decurrens*	Incense cedar	Yes	7.0	5	2	Major Structure or Health Problems	
5015	-121.1601329	38.86632997		*Pinus ponderosa*	Ponderosa pine	Yes	14.0	20	2	Major Structure or Health Problems	
5016	-121.1601313	38.8663017		*Cedrus deodara*	Deodar cedar	No	10.0	10	2	Major Structure or Health Problems	
5017	-121.1601777	38.86634325		*Pinus ponderosa*	Ponderosa pine	Yes	14.0	25	2	Major Structure or Health Problems	
5019	-121.1602196	38.8663043		*Cedrus deodara*	Deodar cedar	No	6.0		2	Major Structure or Health Problems	
5020	-121.1601978	38.86628537		*Calocedrus decurrens*	Incense cedar	Yes	7.0	5	2	Major Structure or Health Problems	
5021	-121.1602446	38.86628704		*Calocedrus decurrens*	Incense cedar	Yes	12.0	10	3	Fair - Minor Problems	
5022	-121.1603813	38.86625833	X	*Calocedrus decurrens*	Incense cedar	Yes	12.0	8	2	Major Structure or Health Problems	
5023	-121.1604438	38.86621965	X	*Quercus wislizeni*	Interior live oak	Yes	23.0	30	2	Major Structure or Health Problems	
5029	-121.1602092	38.86640129		*Eucalyptus globulus*	Blue gum eucalyptus	No	13.0	15	2	Major Structure or Health Problems	
5030	-121.1604477	38.86635141		*Quercus wislizeni*	Interior live oak	Yes	18.0	15	2	Major Structure or Health Problems	
5031	-121.1605257	38.86630606		*Quercus wislizeni*	Interior live oak	Yes	8.0	15	2	Major Structure or Health Problems	
5032	-121.1607976	38.86613317	X	*Quercus wislizeni*	Interior live oak	Yes	16.0	25	2	Major Structure or Health Problems	
5033	-121.1610984	38.86605953	X	*Quercus wislizeni*	Interior live oak	Yes	10.0	10	2	Major Structure or Health Problems	
5034	-121.1611266	38.86603066	X	*Quercus wislizeni*	Interior live oak	Yes	12.0	20	2	Major Structure or Health Problems	
5035	-121.1611358	38.86602492	X	*Quercus wislizeni*	Interior live oak	Yes	33.0	25	2	Major Structure or Health Problems	13,11,9
5036	-121.1612044	38.86600597		*Pinus ponderosa*	Ponderosa pine	Yes	18.0	15	3	Fair - Minor Problems	
5037	-121.1612701	38.86596814		*Quercus wislizeni*	Interior live oak	Yes	40.0	30	2	Major Structure or Health Problems	17, 14, 9
5040	-121.1608512	38.86613475	X	*Quercus wislizeni*	Interior live oak	Yes	13.0	20	2	Major Structure or Health Problems	
5041	-121.1609386	38.86613828	X	*Quercus wislizeni*	Interior live oak	Yes	23.0	30	2	Major Structure or Health Problems	12,11
5042	-121.1610359	38.86611039	X	*Calocedrus decurrens*	Incense cedar	Yes	6.0	4	2	Major Structure or Health Problems	
5043	-121.1610737	38.86609894	X	*Quercus wislizeni*	Interior live oak	Yes	14.0	25	2	Major Structure or Health Problems	
5052	-121.1614721	38.86668479	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	4	1	Extreme Structure or Health Problems	
5053	-121.1612387	38.8664701	X	*Quercus wislizeni*	Interior live oak	Yes	0.0	30	2	Major Structure or Health Problems	
5054	-121.1612688	38.866514	X	*Quercus wislizeni*	Interior live oak	Yes	11.0	15	2	Major Structure or Health Problems	
5056	-121.1614255	38.86669402	X	*Quercus douglasii*	Blue oak	Yes	10.0	10	2	Major Structure or Health Problems	
5057	-121.1614011	38.86675012	X	*Quercus douglasii*	Blue oak	Yes	6.0	5	3	Fair - Minor Problems	
5058	-121.1613493	38.86670368	X	*Quercus wislizeni*	Interior live oak	Yes	7.0	10	2	Major Structure or Health Problems	
5059	-121.1613312	38.86672348	X	*Quercus douglasii*	Blue oak	Yes	9.0	8	2	Major Structure or Health Problems	
5093	-121.1601923	38.86920067	X	*Quercus wislizeni*	Interior live oak	Yes	49.0	25	2	Major Structure or Health Problems	20,18,11
5094	-121.1603812	38.86924219	X	*Quercus wislizeni*	Interior live oak	Yes	41.0	20	2	Major Structure or Health Problems	23,18
5100	-121.1598381	38.86991918		*Quercus wislizeni*	Interior live oak	Yes	10.0	15	2	Major Structure or Health Problems	
5101	-121.1598622	38.86990665		*Quercus wislizeni*	Interior live oak	Yes	21.0	20	2	Major Structure or Health Problems	
5102	-121.1598794	38.86985377		*Quercus douglasii*	Blue oak	Yes	8.0	10	2	Major Structure or Health Problems	
5103	-121.1600665	38.86979742		*Quercus douglasii*	Blue oak	Yes	12.0	12	2	Major Structure or Health Problems	
5104	-121.1601747	38.86978138		*Quercus douglasii*	Blue oak	Yes	13.0	15	2	Major Structure or Health Problems	
5105	-121.1603866	38.86978496		*Eucalyptus globulus*	Blue gum eucalyptus	No	44.0	40	1	Extreme Structure or Health Problems	
5106	-121.1604575	38.86980726		*Quercus wislizeni*	Interior live oak	Yes	8.0	12	1	Extreme Structure or Health Problems	
5107	-121.1605374	38.86980586	X	*Quercus wislizeni*	Interior live oak	Yes	26.0	15	1	Extreme Structure or Health Problems	16,10
5108	-121.1605977	38.86990925		*Quercus wislizeni*	Interior live oak	Yes	17.0	18	2	Major Structure or Health Problems	
5109	-121.1602099	38.86983645		*Pinus sabiniana*	Gray pine	Yes	12.0	15	1	Extreme Structure or Health Problems	
5110	-121.1601893	38.86983622		*Quercus douglasii*	Blue oak	Yes	10.0	20	1	Extreme Structure or Health Problems	
5111	-121.1601696	38.86983797		*Quercus wislizeni*	Interior live oak	Yes	7.0	12	1	Extreme Structure or Health Problems	
5112	-121.1599716	38.86988395		*Pinus sabiniana*	Gray pine	Yes	18.0	18	2	Major Structure or Health Problems	
5113	-121.1599013	38.86993141		*Quercus wislizeni*	Interior live oak	Yes	25.0	15	1	Extreme Structure or Health Problems	7,7,6,5
5118	-121.1599131	38.87005264		*Quercus douglasii*	Blue oak	Yes	22.0	15	2	Major Structure or Health Problems	12,10
5119	-121.1600327	38.87000265		*Quercus douglasii*	Blue oak	Yes	34.0	12	0	Dead	
5120	-121.1600918	38.86999925		*Quercus wislizeni*	Interior live oak	Yes	26.0	10	1	Extreme Structure or Health Problems	7,5,5,3,3,3
5121	-121.1601124	38.869961		*Quercus wislizeni*	Interior live oak	Yes	17.0	15	1	Extreme Structure or Health Problems	6,5,3,3
5122	-121.1601106	38.86992425		*Quercus wislizeni*	Interior live oak	Yes	21.0	18	1	Extreme Structure or Health Problems	11,5,5
5123	-121.1601721	38.86996886		*Quercus douglasii*	Blue oak	Yes	25.0	25	1	Extreme Structure or Health Problems	
5124	-121.160207	38.86994242		*Quercus douglasii*	Blue oak	Yes	16.0	18	2	Major Structure or Health Problems	
5125	-121.1602486	38.86991178		*Quercus douglasii*	Blue oak	Yes	10.0	12	2	Major Structure or Health Problems	
5126	-121.1604318	38.87002918	X	*Quercus wislizeni*	Interior live oak	Yes	131.0	20	2	Major Structure or Health Problems	15,107,6,3
5127	-121.1604899	38.87004421	X	*Quercus wislizeni*	Interior live oak	Yes	8.0	15	1	Extreme Structure or Health Problems	8,3
5128	-121.1604977	38.86999697	X	*Quercus douglasii*	Blue oak	Yes	18.0	15	2	Major Structure or Health Problems	12,6
5129	-121.1605644	38.87002664	X	*Quercus douglasii*	Blue oak	Yes	14.0	12	1	Extreme Structure or Health Problems	9,5
5130	-121.1606699	38.87009135	X	*Quercus douglasii*	Blue oak	Yes	15.0	15	2	Major Structure or Health Problems	10,5
5131	-121.1607147	38.87012079	X	*Quercus wislizeni*	Interior live oak	Yes	12.0	15	1	Extreme Structure or Health Problems	
5132	-121.1605691	38.87015989	X	*Quercus wislizeni*	Interior live oak	Yes	9.0	4	2	Major Structure or Health Problems	5,4
5133	-121.160561	38.8701959	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	10	1	Extreme Structure or Health Problems	
5134	-121.1605699	38.87021113	X	*Quercus wislizeni*	Interior live oak	Yes	14.0	15	1	Extreme Structure or Health Problems	8,6
5135	-121.160552	38.87023846	X	*Quercus douglasii*	Blue oak	Yes	12.0	20	3	Fair - Minor Problems	
5136	-121.1604764	38.87028073	X	*Quercus wislizeni*	Interior live oak	Yes	30.0	20	1	Extreme Structure or Health Problems	17,13
5137	-121.1604182	38.87028784	X	*Quercus wislizeni*	Interior live oak	Yes	7.0	8	2	Major Structure or Health Problems	
5138	-121.160481	38.87031594	X	*Quercus wislizeni*	Interior live oak	Yes	23.0	20	2	Major Structure or Health Problems	14, 9
5139	-121.1604492	38.87034806	X	*Quercus douglasii*	Blue oak	Yes	21.0	25	2	Major Structure or Health Problems	
5140	-121.1603543	38.87040741	X	*Quercus wislizeni*	Interior live oak	Yes	19.0	20	1	Extreme Structure or Health Problems	
5141	-121.1603674	38.87043574	X	*Quercus wislizeni*	Interior live oak	Yes	16.0	25	1	Extreme Structure or Health Problems	
5142	-121.1602097	38.8703772	X	*Quercus wislizeni*	Interior live oak	Yes	16.0	25	2	Major Structure or Health Problems	
5143	-121.1603214	38.87037431	X	*Quercus douglasii*	Blue oak	Yes	6.0	12	1	Extreme Structure or Health Problems	
5144	-121.160302	38.87034877	X	*Quercus douglasii*	Blue oak	Yes	18.0	25	2	Major Structure or Health Problems	
5145	-121.1602777	38.87032566	X	*Quercus douglasii*	Blue oak	Yes	18.0	20	2	Major Structure or Health Problems	
5146	-121.1608626	38.86997707	X	*Quercus douglasii*	Blue oak	Yes	6.0	5	2	Major Structure or Health Problems	
5147	-121.1609065	38.8700393	X	*Quercus douglasii*	Blue oak	Yes	19.0	21	3	Fair - Minor Problems	
5148	-121.1610101	38.8701841	X	*Quercus douglasii*	Blue oak	Yes	12.0	6	1	Extreme Structure or Health Problems	5,3,2,2
5149	-121.161104	38.87027926		*Quercus douglasii*	Blue oak	Yes	14.0	20	2	Major Structure or Health Problems	
5150	-121.161155	38.87041188		*Quercus douglasii*	Blue oak	Yes	20.0	25	1	Extreme Structure or Health Problems	
5151	-121.1611996	38.87047418		*Quercus douglasii*	Blue oak	Yes	13.0	18	3	Fair - Minor Problems	
5152	-121.1612495	38.87049937		*Quercus douglasii*	Blue oak	Yes	16.0	18	3	Fair - Minor Problems	
5153	-121.161285	38.87045192		*Quercus douglasii*	Blue oak	Yes	16.0	15	2	Major Structure or Health Problems	
5154	-121.1614195	38.87040706		*Quercus douglasii*	Blue oak	Yes	27.0	30	2	Major Structure or Health Problems	
5155	-121.1612886	38.87020823		*Quercus wislizeni*	Interior live oak	Yes	7.0	4	2	Major Structure or Health Problems	
5156	-121.1614215	38.87034745		*Quercus wislizeni*	Interior live oak	Yes	15.0	20	2	Major Structure or Health Problems	
5157	-121.1614803	38.87035911		*Quercus wislizeni*	Interior live oak	Yes	18.0	20	3	Fair - Minor Problems	
5158	-121.1614994	38.87039076		*Quercus wislizeni*	Interior live oak	Yes	10.0	15	1	Extreme Structure or Health Problems	
5159	-121.1615167	38.8704393		*Quercus douglasii*	Blue oak	Yes	14.0	25	2	Major Structure or Health Problems	
5160	-121.1616567	38.87063302		*Quercus douglasii*	Blue oak	Yes	20.0	21	2	Major Structure or Health Problems	
5163	-121.1609115	38.86982661	X	*Quercus wislizeni*	Interior live oak	Yes	17.0	15	2	Major Structure or Health Problems	
5164	-121.1614041	38.87004475	X	*Quercus wislizeni*	Interior live oak	Yes	0.0	20	2	Major Structure or Health Problems	
5165	-121.1618427	38.87052056		*Quercus wislizeni*	Interior live oak	Yes	34.0	30	1	Extreme Structure or Health Problems	
5166	-121.1621244	38.87064425	X	*Quercus douglasii*	Blue oak	Yes	21.0	15	1	Extreme Structure or Health Problems	
5171	-121.1619872	38.86906259		*Quercus lobata*	Valley oak	Yes	13.0	12	3	Fair - Minor Problems	
5172	-121.1612772	38.87079476		*Quercus wislizeni*	Interior live oak	Yes	16.0	20	2	Major Structure or Health Problems	
5174	-121.1613534	38.87095293		*Quercus douglasii*	Blue oak	Yes	19.0	21	3	Fair - Minor Problems	
5175	-121.1613672	38.87098641		*Quercus douglasii*	Blue oak	Yes	13.0	15	2	Major Structure or Health Problems	
5176	-121.1613811	38.87105847		*Quercus wislizeni*	Interior live oak	Yes	19.0	15	2	Major Structure or Health Problems	10,9
5177	-121.1613795	38.87110006		*Quercus douglasii*	Blue oak	Yes	6.0	8	1	Extreme Structure or Health Problems	
5178	-121.1613415	38.8711579		*Quercus wislizeni*	Interior live oak	Yes	17.0	18	1	Extreme Structure or Health Problems	6,6,3,2

Tag Number	Longitude	Latitude	Remove	Scientific Name	Common Name	Native	DBH	Canopy Radius (ft)	Arborist Rating	Notes	Multi-Stem DBH
5179	-121.1613189	38.87117218		*Quercus wislizeni*	Interior live oak	Yes	18.0	12	1	Extreme Structure or Health Problems	6,5,3,2,2
5180	-121.1612922	38.8712031		*Quercus wislizeni*	Interior live oak	Yes	18.0	15	1	Extreme Structure or Health Problems	7,7,4
5181	-121.1612151	38.87119015		*Quercus wislizeni*	Interior live oak	Yes	10.0	18	1	Extreme Structure or Health Problems	
5182	-121.1612356	38.87114227		*Quercus wislizeni*	Interior live oak	Yes	27.0	18	2	Major Structure or Health Problems	12, 10,5
5183	-121.1612062	38.871124	X	*Quercus wislizeni*	Interior live oak	Yes	7.0	15	1	Extreme Structure or Health Problems	
5184	-121.1612138	38.87107629		*Quercus wislizeni*	Interior live oak	Yes	33.0	15	2	Major Structure or Health Problems	14,12,7
5192	-121.1613751	38.87119356		*Quercus douglasii*	Blue oak	Yes	7.0	8	2	Major Structure or Health Problems	
5193	-121.1613464	38.87121242		*Quercus douglasii*	Blue oak	Yes	6.0	8	2	Major Structure or Health Problems	
5194	-121.161358	38.87122632		*Quercus douglasii*	Blue oak	Yes	6.0	8	1	Extreme Structure or Health Problems	
5195	-121.1610481	38.87119929	X	*Quercus douglasii*	Blue oak	Yes	20.0	21	2	Major Structure or Health Problems	
5196	-121.1610516	38.87115671	X	*Quercus douglasii*	Blue oak	Yes	33.0	25	2	Major Structure or Health Problems	12,11,10
5197	-121.1609874	38.87109521	X	*Quercus wislizeni*	Interior live oak	Yes	14.0	15	1	Extreme Structure or Health Problems	9,5
5198	-121.1609132	38.87104174	X	*Quercus wislizeni*	Interior live oak	Yes	26.0	18	2	Major Structure or Health Problems	12,10,4
5199	-121.1608698	38.87103848	X	*Quercus wislizeni*	Interior live oak	Yes	16.0	8	2	Major Structure or Health Problems	6,5,5
5200	-121.1608829	38.8710958	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	12	1	Extreme Structure or Health Problems	
5201	-121.1608649	38.87114751	X	*Quercus wislizeni*	Interior live oak	Yes	23.0	25	2	Major Structure or Health Problems	15,8
5202	-121.1607979	38.87111045	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	6	1	Extreme Structure or Health Problems	
5203	-121.1606692	38.87106666	X	*Quercus douglasii*	Blue oak	Yes	8.0	12	1	Extreme Structure or Health Problems	
5204	-121.1606454	38.87106671	X	*Quercus douglasii*	Blue oak	Yes	10.0	15	1	Extreme Structure or Health Problems	
5205	-121.160987	38.8708098	X	*Quercus douglasii*	Blue oak	Yes	15.0	15	3	Fair - Minor Problems	
5206	-121.1609817	38.87062383	X	*Quercus douglasii*	Blue oak	Yes	9.0	12	2	Major Structure or Health Problems	
5207	-121.1609104	38.87076284	X	*Quercus douglasii*	Blue oak	Yes	13.0	15	3	Fair - Minor Problems	
5208	-121.1608018	38.8708056	X	*Quercus douglasii*	Blue oak	Yes	7.0	6	2	Major Structure or Health Problems	
5209	-121.1608399	38.87080156	X	*Quercus douglasii*	Blue oak	Yes	16.0	20	3	Fair - Minor Problems	
5210	-121.1608772	38.87082725	X	*Quercus douglasii*	Blue oak	Yes	24.0	18	2	Major Structure or Health Problems	
5211	-121.1608935	38.87085276	X	*Quercus douglasii*	Blue oak	Yes	7.0	10	1	Extreme Structure or Health Problems	
5212	-121.1608901	38.87088152	X	*Quercus douglasii*	Blue oak	Yes	15.0	20	3	Fair - Minor Problems	
5213	-121.1607622	38.87069706	X	*Quercus douglasii*	Blue oak	Yes	12.0	15	2	Major Structure or Health Problems	
5214	-121.1606998	38.87068133	X	*Quercus douglasii*	Blue oak	Yes	21.0	20	2	Major Structure or Health Problems	
5215	-121.1607371	38.87067	X	*Quercus douglasii*	Blue oak	Yes	10.0	6	2	Major Structure or Health Problems	
5216	-121.1607303	38.870634	X	*Quercus douglasii*	Blue oak	Yes	24.0	15	2	Major Structure or Health Problems	13,11
5217	-121.160769	38.87064699	X	*Quercus douglasii*	Blue oak	Yes	10.0	6	2	Major Structure or Health Problems	
5218	-121.1607373	38.87060023	X	*Quercus douglasii*	Blue oak	Yes	24.0	20	3	Fair - Minor Problems	
5219	-121.160747	38.87055376	X	*Quercus douglasii*	Blue oak	Yes	13.0	20	2	Major Structure or Health Problems	
5220	-121.160788	38.87057131	X	*Quercus douglasii*	Blue oak	Yes	17.0	15	2	Major Structure or Health Problems	
5221	-121.1609284	38.87054368	X	*Quercus douglasii*	Blue oak	Yes	13.0	15	2	Major Structure or Health Problems	
5222	-121.1609723	38.87051878	X	*Quercus douglasii*	Blue oak	Yes	11.0	15	3	Fair - Minor Problems	
5223	-121.1610046	38.87050842	X	*Quercus douglasii*	Blue oak	Yes	6.0	4	1	Extreme Structure or Health Problems	
5224	-121.160946	38.87049867	X	*Quercus douglasii*	Blue oak	Yes	26.0	15	2	Major Structure or Health Problems	14,12
5225	-121.1608737	38.87050273	X	*Quercus douglasii*	Blue oak	Yes	11.0	10	2	Major Structure or Health Problems	
5226	-121.1607749	38.87048023	X	*Quercus douglasii*	Blue oak	Yes	16.0	15	2	Major Structure or Health Problems	8,8
5227	-121.1607202	38.87047097	X	*Quercus douglasii*	Blue oak	Yes	14.0	25	1	Extreme Structure or Health Problems	
5228	-121.1607468	38.87044129	X	*Quercus douglasii*	Blue oak	Yes	10.0	12	2	Major Structure or Health Problems	
5229	-121.1606944	38.87042086	X	*Quercus douglasii*	Blue oak	Yes	11.0	15	2	Major Structure or Health Problems	
5230	-121.1607207	38.87039734	X	*Quercus douglasii*	Blue oak	Yes	18.0	10	2	Major Structure or Health Problems	7,6,5
5231	-121.1608074	38.87035386	X	*Quercus douglasii*	Blue oak	Yes	17.0	25	2	Major Structure or Health Problems	
5232	-121.1608664	38.87035818	X	*Quercus douglasii*	Blue oak	Yes	12.0	15	2	Major Structure or Health Problems	
5233	-121.1609071	38.87038747	X	*Quercus douglasii*	Blue oak	Yes	19.0	20	3	Fair - Minor Problems	
5234	-121.1609367	38.87026537	X	*Quercus douglasii*	Blue oak	Yes	13.0	15	2	Major Structure or Health Problems	
5235	-121.1608545	38.87024282	X	*Quercus douglasii*	Blue oak	Yes	19.0	15	2	Major Structure or Health Problems	10,9
5236	-121.1607265	38.87023796	X	*Quercus douglasii*	Blue oak	Yes	8.0	5	1	Extreme Structure or Health Problems	
5237	-121.1605385	38.87060749	X	*Quercus douglasii*	Blue oak	Yes	34.0	25	2	Major Structure or Health Problems	
5238	-121.1600909	38.87038108	X	*Quercus douglasii*	Blue oak	Yes	16.0	15	2	Major Structure or Health Problems	
5239	-121.1600964	38.87043627	X	*Quercus douglasii*	Blue oak	Yes	15.0	20	2	Major Structure or Health Problems	
5240	-121.1600723	38.87046148	X	*Quercus douglasii*	Blue oak	Yes	8.0	5	2	Major Structure or Health Problems	
5241	-121.1600969	38.87048753	X	*Quercus wislizeni*	Interior live oak	Yes	17.0	20	1	Extreme Structure or Health Problems	11,6
5242	-121.1600022	38.87046778	X	*Quercus douglasii*	Blue oak	Yes	13.0	30	2	Major Structure or Health Problems	
5243	-121.1599802	38.87049157	X	*Quercus douglasii*	Blue oak	Yes	15.0	15	2	Major Structure or Health Problems	
5244	-121.1599139	38.87046204	X	*Quercus douglasii*	Blue oak	Yes	12.0	15	2	Major Structure or Health Problems	
5245	-121.1598599	38.87047065	X	*Quercus wislizeni*	Interior live oak	Yes	10.0	10	1	Extreme Structure or Health Problems	5,5
5246	-121.159799	38.87051778	X	*Quercus wislizeni*	Interior live oak	Yes	37.0	15	1	Extreme Structure or Health Problems	13,10,9,3,2
5247	-121.1597915	38.8705425	X	*Quercus douglasii*	Blue oak	Yes	10.0	15	2	Major Structure or Health Problems	
5248	-121.1598012	38.87057849	X	*Quercus douglasii*	Blue oak	Yes	12.0	20	2	Major Structure or Health Problems	
5249	-121.159835	38.8705902	X	*Quercus douglasii*	Blue oak	Yes	9.0	12	2	Major Structure or Health Problems	
5250	-121.1598671	38.87057875	X	*Quercus wislizeni*	Interior live oak	Yes	22.0	12	1	Extreme Structure or Health Problems	6,6,5,5
5251	-121.1597038	38.87053452	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	10	1	Extreme Structure or Health Problems	
5252	-121.159675	38.87051892	X	*Quercus wislizeni*	Interior live oak	Yes	17.0	25	1	Extreme Structure or Health Problems	
5253	-121.1596479	38.87055233	X	*Quercus wislizeni*	Interior live oak	Yes	11.0	20	2	Major Structure or Health Problems	
5254	-121.1596183	38.87060335	X	*Quercus wislizeni*	Interior live oak	Yes	15.0	15	1	Extreme Structure or Health Problems	10,5
5255	-121.1596805	38.87058906	X	*Quercus wislizeni*	Interior live oak	Yes	15.0	10	1	Extreme Structure or Health Problems	5,4,3,3
5256	-121.1597038	38.87061524	X	*Quercus wislizeni*	Interior live oak	Yes	15.0	12	1	Extreme Structure or Health Problems	8,7
5257	-121.1597664	38.87061144	X	*Quercus douglasii*	Blue oak	Yes	15.0	18	2	Major Structure or Health Problems	
5258	-121.1597352	38.87068785	X	*Quercus wislizeni*	Interior live oak	Yes	44.0	12	1	Extreme Structure or Health Problems	6,5,5,5,4,4,3,3,3,2,2,2
5259	-121.1596636	38.87069064	X	*Quercus douglasii*	Blue oak	Yes	10.0	10	2	Major Structure or Health Problems	
5260	-121.1596921	38.87070821	X	*Quercus wislizeni*	Interior live oak	Yes	31.0	10	1	Extreme Structure or Health Problems	9,8,7,4,3
5261	-121.1595593	38.87069486	X	*Quercus douglasii*	Blue oak	Yes	9.0	12	2	Major Structure or Health Problems	
5262	-121.1595261	38.87072988	X	*Quercus douglasii*	Blue oak	Yes	15.0	20	2	Major Structure or Health Problems	
5263	-121.1594423	38.87072565		*Quercus douglasii*	Blue oak	Yes	17.0	15	2	Major Structure or Health Problems	
5264	-121.1592906	38.87071015		*Quercus wislizeni*	Interior live oak	Yes	33.0	10	1	Extreme Structure or Health Problems	8,7,6,4,4,4
5265	-121.1594557	38.87062009		*Quercus wislizeni*	Interior live oak	Yes	16.0	15	2	Major Structure or Health Problems	
5266	-121.1593254	38.87077409		*Quercus wislizeni*	Interior live oak	Yes	20.0	10	1	Extreme Structure or Health Problems	5,4,4,4,3
5267	-121.159371	38.87076269		*Quercus wislizeni*	Interior live oak	Yes	16.0	10	1	Extreme Structure or Health Problems	6,5,5
5268	-121.159295	38.87077331		*Quercus wislizeni*	Interior live oak	Yes	11.0	10	1	Extreme Structure or Health Problems	5,3,3
5269	-121.1592941	38.8708075		*Quercus wislizeni*	Interior live oak	Yes	12.0	20	2	Major Structure or Health Problems	
5270	-121.1592719	38.87077583		*Quercus wislizeni*	Interior live oak	Yes	29.0	15	1	Extreme Structure or Health Problems	8,7,5,5,4
5272	-121.1592252	38.87081461		*Quercus wislizeni*	Interior live oak	Yes	26.0	10	1	Extreme Structure or Health Problems	7,6,5,4,4
5273	-121.1592382	38.87089552		*Quercus wislizeni*	Interior live oak	Yes	18.0	10	1	Extreme Structure or Health Problems	8,6,2,2
5274	-121.1592066	38.87089189		*Quercus wislizeni*	Interior live oak	Yes	19.0	10	1	Extreme Structure or Health Problems	10,9
5275	-121.1591922	38.87086293		*Quercus wislizeni*	Interior live oak	Yes	27.0	10	1	Extreme Structure or Health Problems	7,6,5,5,4
5276	-121.1591521	38.87087399		*Quercus douglasii*	Blue oak	Yes	10.0	10	2	Major Structure or Health Problems	
5282	-121.1591234	38.87097653		*Aesculus californica*	Buckeye	Yes	15.0	15	2	Major Structure or Health Problems	8,7
5283	-121.1591676	38.87096002		*Quercus douglasii*	Blue oak	Yes	18.0	20	2	Major Structure or Health Problems	
5284	-121.1591635	38.87093042		*Quercus douglasii*	Blue oak	Yes	6.0	8	2	Major Structure or Health Problems	
5298	-121.1591244	38.87131584		*Quercus douglasii*	Blue oak	Yes	8.0	10	2	Major Structure or Health Problems	
5316	-121.1606316	38.87088441	X	*Quercus wislizeni*	Interior live oak	Yes	14.0	12	2	Major Structure or Health Problems	8,6
5317	-121.1606179	38.8708859	X	*Quercus wislizeni*	Interior live oak	Yes	8.0	10	2	Major Structure or Health Problems	
5318	-121.1605809	38.87084676	X	*Quercus douglasii*	Blue oak	Yes	6.0	5	1	Extreme Structure or Health Problems	
5319	-121.1605666	38.8708187	X	*Quercus douglasii*	Blue oak	Yes	13.0	15	2	Major Structure or Health Problems	
5320	-121.1605515	38.87081071	X	*Quercus douglasii*	Blue oak	Yes	21.0	20	2	Major Structure or Health Problems	
5321	-121.1604917	38.87075229	X	*Quercus douglasii*	Blue oak	Yes	13.0	10	3	Fair - Minor Problems	
5322	-121.1605633	38.87072714	X	*Quercus douglasii*	Blue oak	Yes	12.0	12	2	Major Structure or Health Problems	
5323	-121.1604986	38.87076276	X	*Quercus douglasii*	Blue oak	Yes	15.0	15	2	Major Structure or Health Problems	
5324	-121.1600586	38.87059779	X	*Quercus douglasii*	Blue oak	Yes	12.0	8	3	Fair - Minor Problems	
5325	-121.1600364	38.87061451	X	*Quercus douglasii*	Blue oak	Yes	21.0	25	2	Major Structure or Health Problems	

Tag Number	Longitude	Latitude	Remove	Scientific Name	Common Name	Native	DBH	Canopy Radius (ft)	Arborist Rating	Notes	Multi-Stem DBH
5326	-121.1600187	38.8705961	X	*Quercus wislizeni*	Interior live oak	Yes	6.0		1	Extreme Structure or Health Problems	
5327	-121.1600269	38.87062452	X	*Quercus wislizeni*	Interior live oak	Yes	6.0	8	1	Extreme Structure or Health Problems	
5328	-121.1599251	38.87064286	X	*Quercus douglasii*	Blue oak	Yes	13.0	12	2	Major Structure or Health Problems	
5329	-121.1598834	38.87068222	X	*Quercus douglasii*	Blue oak	Yes	12.0	12	2	Major Structure or Health Problems	
5330	-121.1597886	38.87072803	X	*Quercus douglasii*	Blue oak	Yes	17.0	15	3	Fair - Minor Problems	
5331	-121.1598167	38.87075229	X	*Quercus douglasii*	Blue oak	Yes	7.0	8	1	Extreme Structure or Health Problems	
5332	-121.1598324	38.87080431	X	*Quercus douglasii*	Blue oak	Yes	16.0	20	2	Major Structure or Health Problems	
5333	-121.1598656	38.87081686	X	*Quercus douglasii*	Blue oak	Yes	16.0	15	2	Major Structure or Health Problems	
5343	-121.160056	38.87143081		*Quercus kelloggii*	California black oak	Yes	14.0	15	1	Extreme Structure or Health Problems	
5344	-121.1601384	38.87145911		*Quercus kelloggii*	California black oak	Yes	10.0	12	2	Major Structure or Health Problems	
5345	-121.160189	38.87145488		*Quercus kelloggii*	California black oak	Yes	11.0	15	2	Major Structure or Health Problems	
5346	-121.1602189	38.871355		*Quercus wislizeni*	Interior live oak	Yes	9.0	10	2	Major Structure or Health Problems	
5347	-121.160169	38.87140221		*Quercus kelloggii*	California black oak	Yes	9.0	10	2	Major Structure or Health Problems	
5348	-121.1600922	38.87140579		*Quercus kelloggii*	California black oak	Yes	12.0	20	2	Major Structure or Health Problems	
5349	-121.160102	38.87135835		*Quercus wislizeni*	Interior live oak	Yes	14.0	15	2	Major Structure or Health Problems	
5350	-121.1601569	38.87133578		*Quercus wislizeni*	Interior live oak	Yes	12.0	15	2	Major Structure or Health Problems	
5351	-121.1602104	38.87132171		*Quercus kelloggii*	California black oak	Yes	20.0	12	1	Extreme Structure or Health Problems	10,10
5352	-121.1602413	38.87131509	X	*Quercus kelloggii*	California black oak	Yes	8.0	8	2	Major Structure or Health Problems	
5353	-121.1602594	38.87127574	X	*Quercus douglasii*	Blue oak	Yes	6.0	6	1	Extreme Structure or Health Problems	
5354	-121.1602575	38.87120962	X	*Quercus douglasii*	Blue oak	Yes	6.0	6	2	Major Structure or Health Problems	
5355	-121.1602166	38.8712011	X	*Quercus wislizeni*	Interior live oak	Yes	10.0	10	2	Major Structure or Health Problems	
5356	-121.1601764	38.87120483	X	*Quercus wislizeni*	Interior live oak	Yes	8.0	10	1	Extreme Structure or Health Problems	
5357	-121.1601354	38.87119769		*Quercus wislizeni*	Interior live oak	Yes	11.0	15	2	Major Structure or Health Problems	
5358	-121.1601124	38.87126679		*Quercus wislizeni*	Interior live oak	Yes	9.0	15	2	Major Structure or Health Problems	
5359	-121.1600631	38.87125704		*Quercus douglasii*	Blue oak	Yes	8.0	10	2	Major Structure or Health Problems	
5360	-121.1600838	38.87123121		*Quercus wislizeni*	Interior live oak	Yes	9.0	15	1	Extreme Structure or Health Problems	
5361	-121.1600958	38.87121628		*Quercus wislizeni*	Interior live oak	Yes	12.0	12	2	Major Structure or Health Problems	
5362	-121.1601135	38.87120637		*Quercus douglasii*	Blue oak	Yes	10.0	12	1	Extreme Structure or Health Problems	
5363	-121.1601536	38.87113092	X	*Quercus wislizeni*	Interior live oak	Yes	9.0	15	2	Major Structure or Health Problems	
5364	-121.1601144	38.8711451		*Quercus wislizeni*	Interior live oak	Yes	9.0	10	2	Major Structure or Health Problems	
5365	-121.1600111	38.87114168		*Quercus wislizeni*	Interior live oak	Yes	16.0	12	2	Major Structure or Health Problems	7,9
5366	-121.1599847	38.87114407		*Quercus wislizeni*	Interior live oak	Yes	10.0	10	2	Major Structure or Health Problems	
5367	-121.1599735	38.87122459		*Quercus douglasii*	Blue oak	Yes	16.0	20	2	Major Structure or Health Problems	
5368	-121.1599492	38.87126259		*Heteromeles arbutifolia*	Toyon	Yes	7.0	10	1	Extreme Structure or Health Problems	
5369	-121.1598731	38.87126732		*Quercus wislizeni*	Interior live oak	Yes	13.0	15	2	Major Structure or Health Problems	
5370	-121.1598207	38.8712653		*Quercus wislizeni*	Interior live oak	Yes	15.0	12	2	Major Structure or Health Problems	9,6
5371	-121.1598175	38.87139836		*Quercus wislizeni*	Interior live oak	Yes	20.0	12	1	Extreme Structure or Health Problems	
5372	-121.1599721	38.87128546		*Quercus wislizeni*	Interior live oak	Yes	13.0		2	Major Structure or Health Problems	
5413	-121.1596668	38.87142389		*Quercus douglasii*	Blue oak	Yes	6.0	8	2	Major Structure or Health Problems	
5414	-121.1596992	38.87138087		*Quercus wislizeni*	Interior live oak	Yes	12.0	10	1	Extreme Structure or Health Problems	
5415	-121.1595953	38.87136329		*Quercus wislizeni*	Interior live oak	Yes	47.0	20	1	Extreme Structure or Health Problems	14,12,11,10
5416	-121.1596752	38.8713343		*Quercus wislizeni*	Interior live oak	Yes	12.0	8	2	Major Structure or Health Problems	
5417	-121.1597043	38.8712935		*Quercus wislizeni*	Interior live oak	Yes	6.0	8	1	Extreme Structure or Health Problems	
5418	-121.1596247	38.87127264		*Quercus wislizeni*	Interior live oak	Yes	18.0	18	2	Major Structure or Health Problems	
5419	-121.1595463	38.87127855	X	*Quercus wislizeni*	Interior live oak	Yes	14.0	12	2	Major Structure or Health Problems	
5420	-121.1595059	38.8713842		*Quercus wislizeni*	Interior live oak	Yes	7.0	15	1	Extreme Structure or Health Problems	
5421	-121.1594776	38.87137337		*Quercus wislizeni*	Interior live oak	Yes	20.0	10	1	Extreme Structure or Health Problems	8,4,4,2,2
5422	-121.1594839	38.87135948		*Quercus wislizeni*	Interior live oak	Yes	11.0	12	1	Extreme Structure or Health Problems	
5423	-121.1594416	38.87126638	X	*Quercus wislizeni*	Interior live oak	Yes	28.0	15	2	Major Structure or Health Problems	10,9,9
5424	-121.1594008	38.87122457	X	*Quercus douglasii*	Blue oak	Yes	13.0	15	3	Fair - Minor Problems	
6901	-121.160513	38.87097914	X	*Quercus douglasii*	Blue oak	Yes	8.2	15	2	Major Structure or Health Problems	
6902	-121.1605592	38.8709097	X	*Quercus wislizeni*	Interior live oak	Yes	9.6	17	3	Fair - Minor Problems	
6903	-121.1605278	38.87088298	X	*Quercus douglasii*	Blue oak	Yes	18.0	23	3	Fair - Minor Problems	
6904	-121.1604768	38.87087646	X	*Quercus douglasii*	Blue oak	Yes	10.3	16	3	Fair - Minor Problems	
6905	-121.1604661	38.8708868	X	*Aesculus californica*	Buckeye	Yes	11.0	13	3	Fair - Minor Problems	
6906	-121.1604562	38.87091036	X	*Quercus douglasii*	Blue oak	Yes	13.5	21	4	Good - No Apparent Problems	
6907	-121.1604076	38.87084098	X	*Quercus douglasii*	Blue oak	Yes	18.0	21	3	Fair - Minor Problems	
6908	-121.1603944	38.87079365	X	*Quercus douglasii*	Blue oak	Yes	6.1	10	3	Fair - Minor Problems	
6910	-121.1603534	38.87079952	X	*Quercus douglasii*	Blue oak	Yes	6.9	11	2	Major Structure or Health Problems	
6911	-121.1602323	38.87078291	X	*Quercus wislizeni*	Interior live oak	Yes	11.9	22	2	Major Structure or Health Problems	
6912	-121.1600595	38.87080919	X	*Quercus douglasii*	Blue oak	Yes	7.8	13	3	Fair - Minor Problems	
6913	-121.1601386	38.87090383	X	*Quercus douglasii*	Blue oak	Yes	12.4	17	2	Major Structure or Health Problems	
6914	-121.1601449	38.87088497	X	*Quercus douglasii*	Blue oak	Yes	8.4	13	2	Major Structure or Health Problems	
6915	-121.1600905	38.87085969	X	*Quercus douglasii*	Blue oak	Yes	14.8	21	3	Fair - Minor Problems	
6916	-121.1600507	38.87086178	X	*Quercus douglasii*	Blue oak	Yes	11.8	23	2	Major Structure or Health Problems	
6917	-121.1600265	38.87087131	X	*Quercus douglasii*	Blue oak	Yes	14.5	22	2	Major Structure or Health Problems	
6918	-121.1599412	38.87087328	X	*Quercus douglasii*	Blue oak	Yes	6.8	10	3	Fair - Minor Problems	
6919	-121.1598955	38.87083046	X	*Quercus douglasii*	Blue oak	Yes	14.9	21	3	Fair - Minor Problems	
6920	-121.1598631	38.87085013	X	*Quercus douglasii*	Blue oak	Yes	17.7	21	2	Major Structure or Health Problems	
6921	-121.1596865	38.87084024	X	*Quercus douglasii*	Blue oak	Yes	12.6	19	3	Fair - Minor Problems	
6922	-121.1599011	38.87096557	X	*Quercus douglasii*	Blue oak	Yes	14.3	22	1	Extreme Structure or Health Problems	
6923	-121.1598883	38.87099046	X	*Quercus wislizeni*	Interior live oak	Yes	22.1	23	2	Major Structure or Health Problems	
6924	-121.1599452	38.87101019	X	*Quercus wislizeni*	Interior live oak	Yes	7.1	11	2	Major Structure or Health Problems	
6925	-121.1599579	38.87102246	X	*Quercus wislizeni*	Interior live oak	Yes	7.2	13	2	Major Structure or Health Problems	
6926	-121.1600233	38.87102884	X	*Quercus wislizeni*	Interior live oak	Yes	6.6	9	2	Major Structure or Health Problems	
6927	-121.1600036	38.87099851	X	*Quercus wislizeni*	Interior live oak	Yes	7.8	11	2	Major Structure or Health Problems	
6928	-121.1599969	38.87094574	X	*Quercus douglasii*	Blue oak	Yes	6.7	10	3	Fair - Minor Problems	
6929	-121.1600918	38.87092221	X	*Quercus douglasii*	Blue oak	Yes	13.0	19	3	Fair - Minor Problems	
6930	-121.1600909	38.87099503	X	*Quercus douglasii*	Blue oak	Yes	15.5	20	3	Fair - Minor Problems	
6931	-121.1600384	38.87102414	X	*Quercus douglasii*	Blue oak	Yes	18.5	23	3	Fair - Minor Problems	
6932	-121.1602324	38.87094323	X	*Quercus douglasii*	Blue oak	Yes	12.8	17	2	Major Structure or Health Problems	
6933	-121.1602468	38.87097097	X	*Aesculus californica*	Buckeye	Yes	6.1	12	3	Fair - Minor Problems	
6934	-121.160253	38.87097398	X	*Quercus wislizeni*	Interior live oak	Yes	12.5	16	1	Extreme Structure or Health Problems	
6935	-121.1603823	38.87095597	X	*Quercus wislizeni*	Interior live oak	Yes	12.0	19	1	Extreme Structure or Health Problems	
6936	-121.1602982	38.87100661	X	*Quercus wislizeni*	Interior live oak	Yes	14.4	17	2	Major Structure or Health Problems	
6937	-121.1603466	38.87104146	X	*Quercus wislizeni*	Interior live oak	Yes	16.5	19	2	Major Structure or Health Problems	
6938	-121.1603746	38.87108408	X	*Quercus wislizeni*	Interior live oak	Yes	16.8	23	2	Major Structure or Health Problems	
6939	-121.1602063	38.87105407	X	*Quercus douglasii*	Blue oak	Yes	9.0	13	3	Fair - Minor Problems	
6940	-121.1601872	38.87111163	X	*Quercus wislizeni*	Interior live oak	Yes	7.3	10	2	Major Structure or Health Problems	
6941	-121.1602086	38.87112316	X	*Quercus wislizeni*	Interior live oak	Yes	11.0	10	1	Extreme Structure or Health Problems	
6942	-121.1602844	38.87113397	X	*Quercus wislizeni*	Interior live oak	Yes	6.5		2	Major Structure or Health Problems	
6943	-121.1605044	38.87103571	X	*Aesculus californica*	Buckeye	Yes	13.0	16	3	Fair - Minor Problems	
6944	-121.1606014	38.87104944	X	*Quercus wislizeni*	Interior live oak	Yes	10.8	17	1	Extreme Structure or Health Problems	
6945	-121.1605913	38.87107262	X	*Quercus wislizeni*	Interior live oak	Yes	10.5	21	2	Major Structure or Health Problems	
6946	-121.1605636	38.87108538	X	*Quercus wislizeni*	Interior live oak	Yes	10.4	18	2	Major Structure or Health Problems	
6947	-121.1606564	38.87112282	X	*Quercus wislizeni*	Interior live oak	Yes	17.3	24	2	Major Structure or Health Problems	
6948	-121.1606485	38.87118915	X	*Quercus wislizeni*	Interior live oak	Yes	9.6	16	1	Extreme Structure or Health Problems	
6949	-121.1606122	38.87117598	X	*Quercus wislizeni*	Interior live oak	Yes	8.0	15	3	Fair - Minor Problems	
6950	-121.1604226	38.87119691	X	*Quercus wislizeni*	Interior live oak	Yes	11.2	20	2	Major Structure or Health Problems	
6951	-121.1612325	38.8712493		*Quercus wislizeni*	Interior live oak	Yes	10.6	18	2	Major Structure or Health Problems	
6952	-121.1611605	38.87127971		*Quercus wislizeni*	Interior live oak	Yes	22.0	21	1	Extreme Structure or Health Problems	
6954	-121.1611165	38.87136774	X	*Quercus x morehus*	Oracle oak	Yes	13.6	19	3	Fair - Minor Problems	
6955	-121.1610883	38.87140254	X	*Quercus wislizeni*	Interior live oak	Yes	9.2	13	2	Major Structure or Health Problems	
6956	-121.161043	38.87138341	X	*Quercus douglasii*	Blue oak	Yes	13.9	22	3	Fair - Minor Problems	

Tag Number	Longitude	Latitude	Remove	Scientific Name	Common Name	Native	DBH	Canopy Radius (ft)	Arborist Rating	Notes	Multi-Stem DBH
6957	-121.1610125	38.87140203	X	*Quercus wislizeni*	Interior live oak	Yes	6.8	13	1	Extreme Structure or Health Problems	
6958	-121.1609942	38.87127562	X	*Quercus douglasii*	Blue oak	Yes	11.6	19	3	Fair - Minor Problems	
6959	-121.1608299	38.87128251	X	*Quercus wislizeni*	Interior live oak	Yes	16.7	24	2	Major Structure or Health Problems	
6960	-121.1608118	38.87132564		*Quercus wislizeni*	Interior live oak	Yes	16.4	19	2	Major Structure or Health Problems	
6961	-121.1607413	38.87134577	X	*Quercus wislizeni*	Interior live oak	Yes	8.5	14	2	Major Structure or Health Problems	
6962	-121.1608111	38.87138231	X	*Quercus wislizeni*	Interior live oak	Yes	10.3	19	2	Major Structure or Health Problems	
6963	-121.1605588	38.8713198	X	*Quercus wislizeni*	Interior live oak	Yes	26.1	30	3	Fair - Minor Problems	
6964	-121.1605662	38.87146564	X	*Quercus kelloggii*	California black oak	Yes	26.8	33	3	Fair - Minor Problems	
6966	-121.1604304	38.87142404	X	*Quercus wislizeni*	Interior live oak	Yes	23.1	20	1	Extreme Structure or Health Problems	
6969	-121.1604102	38.87142605	X	*Quercus kelloggii*	California black oak	Yes	7.0	10	3	Fair - Minor Problems	
6970	-121.1604361	38.8714182	X	*Quercus wislizeni*	Interior live oak	Yes	29.5	34	2	Major Structure or Health Problems	
6971	-121.1603095	38.87135408	X	*Quercus kelloggii*	California black oak	Yes	9.1	10	3	Fair - Minor Problems	
6972	-121.1603594	38.87128938	X	*Quercus wislizeni*	Interior live oak	Yes	9.7	16	3	Fair - Minor Problems	
6973	-121.1603644	38.8712508	X	*Quercus douglasii*	Blue oak	Yes	8.8	21	2	Major Structure or Health Problems	
6974	-121.1603072	38.87124879	X	*Quercus wislizeni*	Interior live oak	Yes	11.0	14	2	Major Structure or Health Problems	
6975	-121.1602767	38.87122979	X	*Quercus douglasii*	Blue oak	Yes	7.4	13	3	Fair - Minor Problems	
8395	-121.1595331	38.87143588		*Quercus wislizeni*	Interior live oak	Yes	6.0	7	2	Major Structure or Health Problems	
9354	-121.1593563	38.87104995	X	*Quercus douglasii*	Blue oak	Yes	31.0	26	4	Good - No Apparent Problems	18, 13
9355	-121.1593809	38.87109718	X	*Quercus douglasii*	Blue oak	Yes	15.0	16	3	Fair - Minor Problems	
9356	-121.15927	38.87106821	X	*Quercus douglasii*	Blue oak	Yes	17.0	20	3	Fair - Minor Problems	
9357	-121.1592366	38.87111818	X	*Quercus douglasii*	Blue oak	Yes	15.0	18	3	Fair - Minor Problems	
9358	-121.1591834	38.8710439	X	*Quercus douglasii*	Blue oak	Yes	16.0	21	3	Fair - Minor Problems	
9359	-121.1592537	38.87117944	X	*Quercus douglasii*	Blue oak	Yes	5.0	7	3	Fair - Minor Problems	
9360	-121.1591628	38.87121159	X	*Quercus wislizeni*	Interior live oak	Yes	22.0	30	2	Major Structure or Health Problems	
9362	-121.1592724	38.87135113		*Quercus wislizeni*	Interior live oak	Yes	8.0	16	3	Fair - Minor Problems	
9363	-121.1593279	38.87133223		*Quercus wislizeni*	Interior live oak	Yes	16.0	21	2	Major Structure or Health Problems	
9364	-121.1593558	38.87133746		*Quercus douglasii*	Blue oak	Yes	12.0	12	3	Fair - Minor Problems	
9394	-121.1595246	38.87145928		*Quercus douglasii*	Blue oak	Yes	6.0	8	2	Major Structure or Health Problems	
9396	-121.1595096	38.87143805		*Quercus kelloggii*	California black oak	Yes	6.0	8	3	Fair - Minor Problems	
9397	-121.1594998	38.87142511		*Quercus wislizeni*	Interior live oak	Yes	7.0	12	2	Major Structure or Health Problems	
9398	-121.1595006	38.87141868		*Quercus wislizeni*	Interior live oak	Yes	10.0	12	2	Major Structure or Health Problems	
9399	-121.1594694	38.87138406		*Quercus wislizeni*	Interior live oak	Yes	5.0		3	Fair - Minor Problems	
9565	-121.1594827	38.87136752		*Quercus douglasii*	Blue oak	Yes	12.0	15	3	Fair - Minor Problems	

APPENDIX E



Aquatic Resources Delineation Report

7615 Callison Road Property

Placer County, California
19 April 2021

MADRONE ECOLOGICAL CONSULTING

Prepared for:
Evan Mackenzie
Building Engineering & Management, Inc.
4780 Rocklin Road
Rocklin, California 95677

Recommended Citation:
Madrone Ecological Consulting, LLC (Madrone). 2021. *Aquatic Resources Delineation Report for 7615 Callison Road Property*. Prepared for Building Engineering & Management, Inc. Published on 19 April 2021.

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1.0 INTRODUCTION

This report presents the results of a delineation of aquatic resources within the 7615 Callison Road Property (Study Area) conducted by Madrone Ecological Consulting, LLC (Madrone). The approximately 18-acre Study Area is generally located west of the intersection of Taylor Road and Callison Road, in the unincorporated community of Penryn, Placer County, California. The Study Area is within Sections 23 and 26, Township 12 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2018) (**Figure 1**).

1.1 Contact Information

Property Owner	***Agent***
Evan Mackenzie	Ben Watson
Building Engineering & Management, Inc.	Madrone Ecological Consulting, LLC
4780 Rocklin Road	8421 Auburn Blvd., Suite #248
Rocklin, CA 95677	Citrus Heights, CA 95610

2.0 METHODOLOGY

Madrone biologists Matt Shaffer and Dustin Brown conducted a delineation of aquatic resources within the Study Area on 30 June and 1 July, 2020. Water features and data points were mapped in the field with a GPS unit capable of sub-meter accuracy (Arrow 100). Three-parameter data (vegetation, soils, and hydrology) were collected at each data point, documenting wetland/waters or upland status, as appropriate. The delineation map was prepared in accordance with the *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a). The GPS data was overlaid on an ortho-rectified aerial photograph (Google Earth and Maxar 2020).

The delineation was performed in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (USACE 2016b). U.S. Army Corps of Engineers (USACE) regulations (33 CFR 328) were used to determine the presence of Waters of the United States other than wetlands. The most recent *National Wetland Plant List* (USACE 2018) was used to determine the wetland indicator status of plants observed in the Study Area. The *Jepson eFlora* (Jepson Flora Project 2020) was used for plant nomenclature, except where it conflicted with the nomenclature in the *National Wetland Plant List*, which was given priority on the data sheets.

We are requesting an Approved Jurisdictional Determination for the Study Area.

3.0 EXISTING CONDITIONS

The Study Area is located west of the intersection of Taylor Road and Callison Road. The site is bounded to the south by a Union Pacific Railroad right-of-way and Callison Road, and to the north by a Union Pacific Railroad right-of-way. Rural large ranchette residential lots and ruderal grassland border the site to the east and west. The Study Area is accessible from the southern edge via an unnamed paved road off of Callison Road. The Study Area consists of a large hill at the northern end of site that generally slopes downward toward the southern boundary. In addition, the topography gently slopes downward from east to west. The Study Area consists of rolling topography; the elevation on-site ranges from approximately 725 feet above mean sea level (MSL) at the southwest corner to 930 feet above MSL at the summit of the hill in the northeast portion of the Study Area.

The Study Area primarily consists of disturbed ruderal grassland, which occurs on more level parts of the site from the approximate middle of the property to the south end of the Study Area. Much of the area previously consisted of shrubland, but was cleared and graded between 2018 and 2020 in preparation for the installation of vineyards. Portions of this area at the south end of the site were completely unvegetated at the time of the survey and are being established as grape vineyards; other portions consist of sparse to robust patches of ruderal vegetation, such as tumble mustard (*Hirschfeldia incana*), stinkwort (*Dittrichia graveolens*), yellow star-thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulgare*), skeleton weed (*Chondrilla juncea*), hedgehog grass (*Cynosurus echinatus*), rose clover (*Trifolium hirtum*), moth mullein (*Verbascum blattaria*), woolly mullein (*Verbascum thapsus*), yellow devil's claw (*Proboscidea lutea*), spiny cockleburr (*Xanthium spinosum*), manyflower tobacco (*Nicotiana acuminata*), Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Festuca perennis*), and wild oat (*Avena fatua*). A portion of the ruderal habitat within a shallow upland swale in the middle of the site is a slightly mesic. This area includes more facultative-dominant species such as Muehlenberg's centaury (*Zeltnera muehlenbergii*), curly dock (*Rumex crispus*), bird's foot trefoil (*Lotus corniculatus*), English plantain (*Plantago lanceolata*), white clover (*Trifolium repens*), poison hemlock (*Conium maculatum*), and pennyroyal (*Mentha pulegium*).

Annual grassland is located along the lower slopes of the hill in the northwest portion of the site. The vegetation within this community is generally robust, and is dominated by annual grasses and forbs including soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), hedgehog grass, wild oat, and rose clover. The higher-elevation portions of the hill in the northeast section of the Study Area feature oak woodland dominated by blue oak (*Quercus douglasii*). Other common tree species within this community include interior live oak (*Quercus wislizeni*), California buckeye (*Aesculus californica*), and grey pine (*Pinus sabiniana*). The understory features a similar suite of species as the annual grassland, and also includes tall sock-destroyer (*Torilis arvensis*), Italian thistle (*Carduus pycnocephalus*), California pipevine (*Aristolochia californica*), California brome grass (*Bromus carinatus*), blue dicks (*Dichelostemma capitatum*), and purple needle grass (*Stipa pulchra*).

Small patches of oak woodland and non-native ornamental trees are located along Callison Road, which cuts through the site at the southern boundary. In addition, several unvegetated dirt roads are interspersed

throughout the ruderal grassland and oak woodland within the Study Area. During the delineation, a small group of cattle were observed grazing the site.

3.1 Hydrology

Surface water within the Study Area is driven by rainfall; water within the majority of the site topographically drains towards a shallow non-wetland swale within the center of the site, which then drains into an off-site pond located just west of the Study Area. Water within the pond empties into a series of unnamed drainages which flow southwest, eventually emptying into Antelope Creek. Antelope Creek is a tributary to Dry Creek, which drains into Steelhead Creek, then Bannon Slough, and ultimately the Sacramento River. The Study Area is located in the *Dry Creek Watershed*, which is part of the larger *Lower American River Watershed* (HUC 18020111) (USGS 1984). Water within the Antelope Canal within the Study Area originates from several sources including the Yuba, Bear, and American Rivers.

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2020), four soil mapping units occur within the Study Area (**Figure 2**). Although none of the soil units consist of hydric components, two units (130 and 132) contain hydric inclusions (NRCS 2020). The soils within the Study Area fall within the hydrological soil groups B or D. Group B soils generally have a moderate infiltration rate when thoroughly wet and a moderate rate of water transmission, while group D soils have a slow infiltration rate when thoroughly wet, a very slow rate of water transmission, and typically a higher runoff potential. The soils found within the Study Area are summarized in **Table 1**.

Table 1. Hydric Rating of Soils within the Study Area

Soil Unit Name	Map Unit Symbol	Hydric Rating
Andregg coarse sandy loam, 15 to 30% slopes	108	No
Andregg coarse sandy loam, rocky, 30 to 50% slopes	111	No
Caperton-Andregg coarse sandy loams, 2 to 15% slopes	130	No
Caperton-Rock outcrop complex, 2 to 30% slopes	132	No

3.3 Driving Directions

The Study Area is located off of Callison Road in Penryn, California, 95663. To access the Study Area from Sacramento, drive east on I-80 towards Penryn. Take exit 112 and turn left onto Penryn Road. Continue on Penryn Road for approximately 0.9 mile, then turn right onto Taylor Road and drive approximately 1.7 miles before turning left onto Callison Road. The Study Area is located to the right after driving approximately 0.5 mile on Callison Road.

4.0 RESULTS

A total of approximately 0.099 acre of aquatic resources were delineated within the Study Area, all of which were other waters. A single roadside ditch and the Antelope Canal were delineated within the Study Area. A summary of the aquatic resources found on-site and their acreages is shown in **Table 2**.

Table 2. Aquatic Resources Delineated within the Study Area

Resource Type	Acreage
Other Waters	
Canal	0.093
Roadside Ditch	0.006
Total	**0.099**

Data sheets are included in **Attachment A**. Maps of the aquatic resources within the Study Area are included as **Figure 3** and **Attachment B**, and a list of the plant species observed in the Study Area with their wetland indicator status is included in **Attachment C**. Representative site photographs are included in **Attachment D.** GIS Shapefiles and the *Aquatic Resources Excel Spreadsheets* for the aquatic resources shown on **Figure 3** and **Attachment B** are included on a CD in **Attachment E.** Each of the feature types are described below.

4.1 Canal

Three segments of the Antelope Canal (Canal-1, Canal-2, and Canal-3), totaling 0.093 acre, run within the northern portion of the site along the slope of a large hill within the Study Area. The canal is approximately 7 feet wide, and generally bisects oak woodland to the north, and annual grassland and ruderal habitat to the south. The feature is a uniform, concrete-lined channel that is completely devoid of vegetation. Water within the canal runs to the northwest through the Study Area before crossing under a Union Pacific Railroad right-of-way to the north of the site. The canal was mapped at the Ordinary High Water Mark (OHWM), which was determined based on water marks and topographic breaks.

The Antelope Canal is a man-made feature that conveys irrigation water from several sources including the Yuba River, Bear River, and the American River to properties in Penryn, Loomis, and unincorporated portions of western Placer County.

The Antelope Canal would be considered not subject to Corps jurisdiction. It is a perennial constructed ditch, tributary to Antelope Creek; however, it does not meet any of the definitions of "tributary" that would make it jurisdictional. A ditch that meets the definition of "tributary" must either relocate a tributary, be constructed in a tributary, or be constructed in an adjacent wetland. By definition, the Antelope Canal does not relocate a tributary, was not constructed in a tributary, and was not constructed within an adjacent wetland and would continue to be considered not subject to Corps jurisdiction under the 2020 CWR Section 328.3(b)(v).

4.2 Roadside Ditch

A single small roadside drainage ditch (RD-1, 0.006 acre) is located within the southern portion of the Study Area, along the south side of Callison Road. The ditch is an unvegetated, shallow dirt feature that conveys ephemeral stormwater runoff from Callison Road; water within the ditch drains a short distance to the southwest into a culvert. The ditch was mapped at the OHWM, which was identified based on water marks and topographic breaks.

The roadside ditch was created in uplands to drain upland runoff, receives ephemeral flows, and is not a relocated tributary. As such, we believe that this feature would be considered a Non-Jurisdictional Water under the 2020 CWR Section 328.3(b)(iii) and Section 328.3(b)(v).

5.0 CONCLUSION

A total of 0.099 acre of aquatic resources were mapped within the Study Area. As detailed above, we believe that these features would be considered Non-Jurisdictional Waters under the 2020 CWR, and therefore, no Waters of the U.S. are present within the Study Area. The applicant is requesting an Approved Jurisdictional Determination for the Aquatic Resources Delineation Map included as **Attachment B**. A letter providing USACE staff accompanied access to the Study Area is included as **Attachment F**.

6.0 REFERENCES

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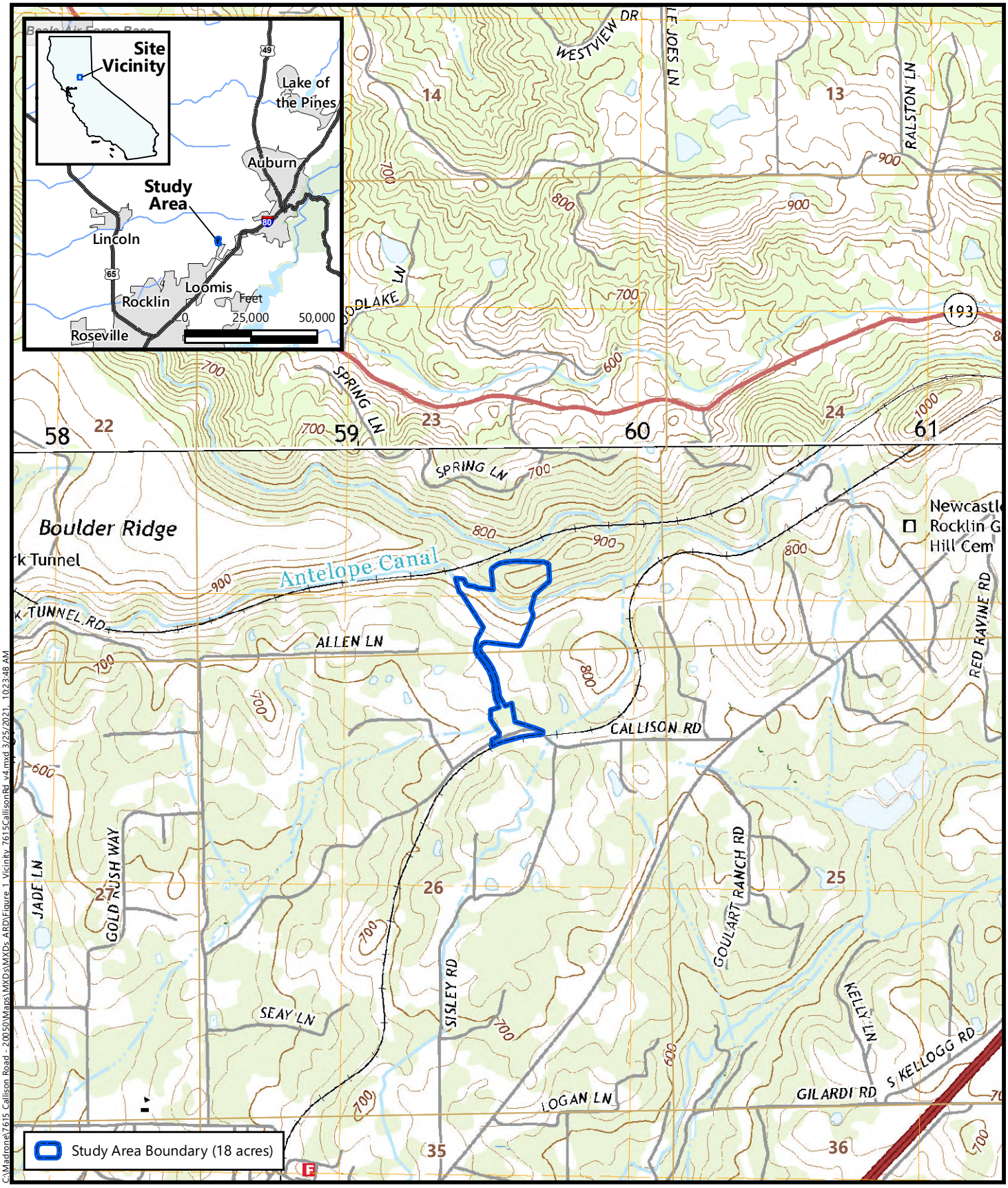
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Figures

Figure 1. Site and Vicinity

Figure 2. Natural Resources Conservation Service Soils

Figure 3. Aquatic Resources



N

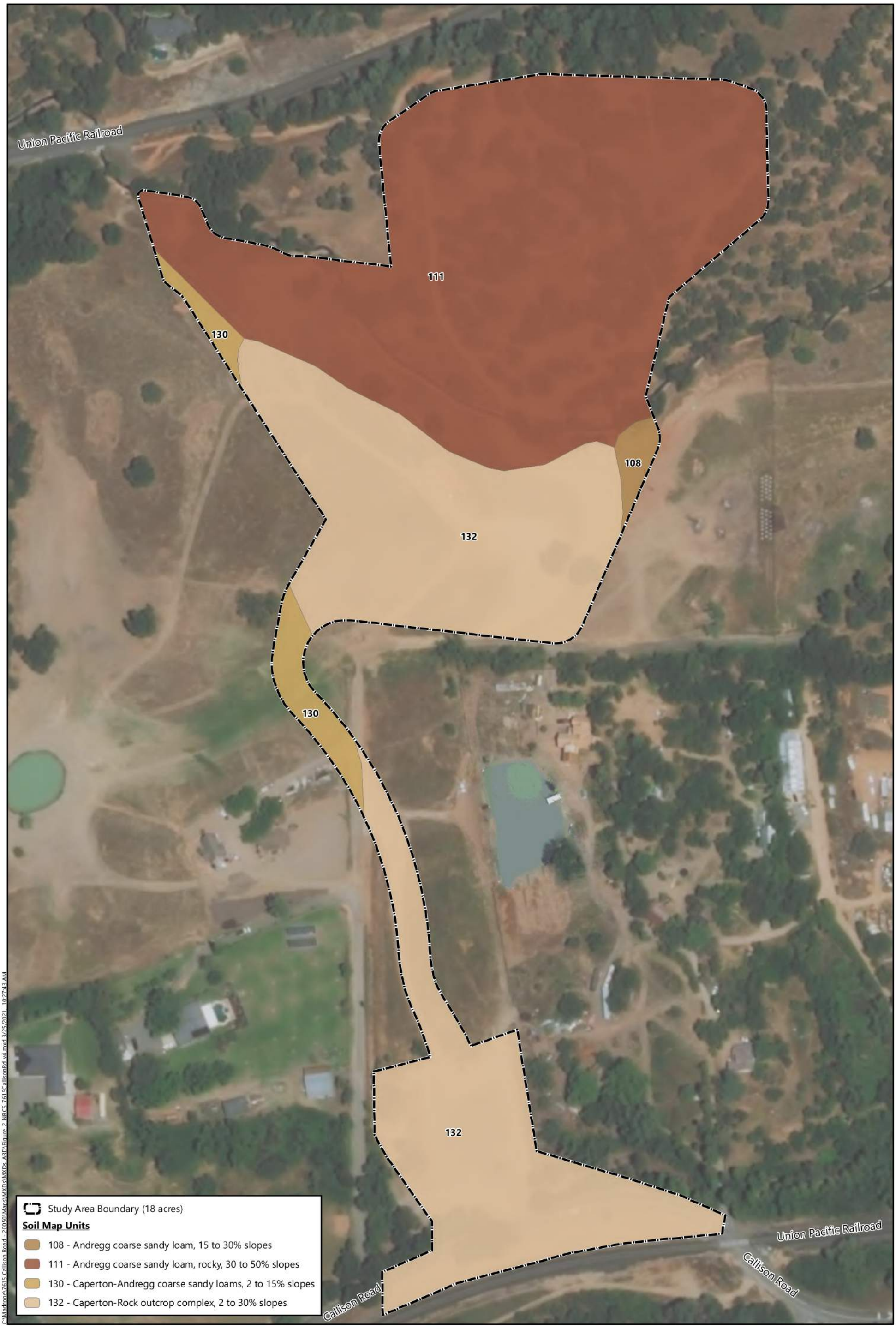
Feet
0 750 1,500

Source: United States Geologic Survey, 2018.
Sections 23 and 26, Township 12 North, Range 7 East, MDB&M
"Rocklin, California" 7.5-Minute Topographic Quadrangle
Longitude -121.160895, Latitude 38.869051

Figure 1
Site and Vicinity

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING



N

Feet
0 75 150

Soil Survey Source: *USDA, Soil Conservation Service.*
Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part
Aerial Source: Maxar, 17June 2020

Figure 2
Natural Resources Conservation Service Soils

7615 Callison Road
Placer County, California

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N

Feet
0 75 150

Aerial Source: Maxar, 17 June 2020

Figure 3
Aquatic Resources

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

Attachments

Attachment A. Arid West Wetland Determination Data Forms

Attachment B. Aquatic Resources Delination Map

Attachment C. Plant Species Observed within the Study Area

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Attachment F. Access Letter

Attachment A

Arid West Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 7615 Callison Road City/County: Penryn, Placer County Sampling Date: 07/01/20
Applicant/Owner: Evan Mackenzie State: CA Sampling Point: DP 1
Investigator(s): Matt Shaffer Section, Township, Range: S 26, T 12N, R 7E
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): <1%
Subregion (LRR): Mediterranean California (LRR C) Lat: 38.86633399 Long: -121.1604455 Datum: NAD83
Soil Map Unit Name: 132 - Caperton-Rock outcrop complex, 2-30% slopes NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No **X**	**Is the Sampled Area within a Wetland?** Yes ____ No **X**
Hydric Soil Present?	Yes ____	No **X**	
Wetland Hydrology Present?	Yes ____	No **X**	

Remarks: Local low point adjacent to stormwater drainage gate. Recently graded and unvegetated. May form wetland with sufficient time.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 1 meter^2)			
1. *Rubus armeniacus*	T		FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	=Total Cover		
% Bare Ground in Herb Stratum 100	% Cover of Biotic Crust 0		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: **0** (A)
Total Number of Dominant Species Across All Strata: **0** (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: **0%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL species	**0** x1 =	**0**
FACW species	**0** x2 =	**0**
FAC species	**0** x3 =	**0**
FACU species	**0** x4 =	**0**
UPL species	**0** x5 =	**0**
Column Totals:	**0** (A)	**0** (B)

Prevalence Index = B/A = **N/A**

Hydrophytic Vegetation Indicators:
____ Dominance Test is >50%
____ Prevalence Index is ≤3.0[1]
____ Morphological Adaptationd[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No **X**

Remarks: Very sparse FAC vegetation, otherwise unvegetated.

SOIL

Sampling Point: DP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	95	7.5YR 2.5/1	5	C	M	Loamy sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks: Redox faint.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- X* Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): 0

Water Table Present? Yes ___ No X Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): 0

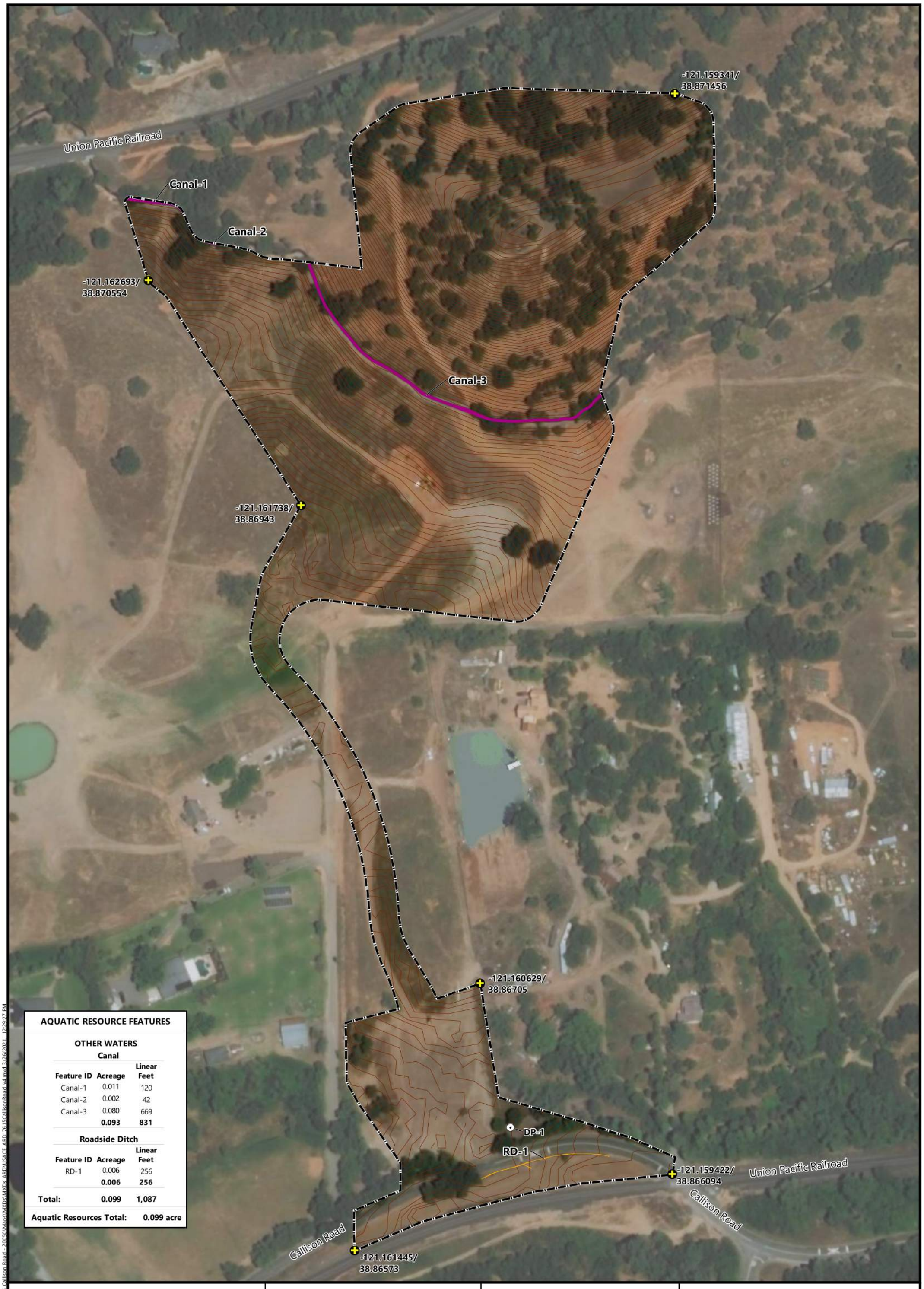
Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: *Surface soil cracks due to sprinkler system immediately adjacent to feature leading to some temporary ponding (ponded for less than an hour) and subsequent drying to form cracks. Not indicative of actual wetland hydrology.

Attachment B

Aquatic Resources Delineation Map



AQUATIC RESOURCE FEATURES

OTHER WATERS

Canal

Feature ID	Acreage	Linear Feet
Canal-1	0.011	120
Canal-2	0.002	42
Canal-3	0.080	669
	0.093	**831**

Roadside Ditch

Feature ID	Acreage	Linear Feet
RD-1	0.006	256
	0.006	**256**
Total:	**0.099**	**1,087**

Aquatic Resources Total: **0.099 acre**

C:\Madrone\7615 Callison Road - 20050\Maps\MXDs\MXDs ARD\USACE ARD 7615Callisonfoad v4.mxd 3/26/2021 12:29:27 PM

Notes:

Map Scale: 1 inch = 100 feet
Coordinate System: NAD 1983 State Plane California II
Datum: NAD83
Projection: Lambert Conformal Conic
Vertical Data: NAVD88
Aerial Base: Maxar
Aerial Base Flown: 17 June 2020
Topographic Contours: BEM Inc.
Date Map Prepared: 25 March 2021
Map Prepared by: N. Bente
Delineation Performed by: D. Bown, M. Shaffer

Definitions:

NAD = North American Datum
NAVD = North American Vertical Datum
USDA = United States Department of Agriculture

Prepared For:

Building Engineering & Management, Inc.
c/o Evan Mackenzie
4780 Rocklin Road
Rocklin, California 95677

N

Feet
0 37.5 75 150

Study Area Boundary (18 acres)
Reference Point
Data Point
Ground Surface Elevation, 2 foot contour interval

Aquatic Resources (0.099 acre)

Other Waters (0.099 acre)

Canal (0.093 acre)
Roadside Ditch (0.006 acre)

Aquatic Resources Delineation

7615 Callison Road

Placer County, California

MADRONE ECOLOGICAL CONSULTING
8421 Auburn Boulevard, Suite 248
Citrus Heights, California 95610
(916) 822.3230 | www.madroneeco.com

Attachment C

Plant Species Observed within the Study Area

Plant Species Observed within the 7615 Callison Road Study Area 30 June, 1 July 2020

Species Name	Common Name	Wetland Indicator Status
Acmispon americanus var. *americanus*	Spanish lotus	UPL
Aesculus californica	California buckeye	UPL
Ailanthus altissima	Tree of heaven	FACU
Albizia julibrissin	Silk tree	UPL
Amaranthus albus	Tumbleweed	FACU
Aristolochia californica	California pipevine	UPL
Artemisia douglasiana	California mugwort	FAC
Avena fatua	Wild oat	UPL
Baccharis pilularis	Coyote brush	UPL
Brassica nigra	Black mustard	UPL
Briza minor	Annual quaking grass	FAC
Bromus carinatus	California brome grass	UPL
Bromus diandrus	Ripgut brome	UPL
Bromus hordeaceus	Soft chess	FACU
Bromus madritensis	Foxtail brome	UPL
Calocedrus decurrens	Incense cedar	UPL
Carduus pycnocephalus	Italian thistle	UPL
Ceanothus cuneatus var. *cuneatus*	Buckbrush	UPL
Cedrus deodara	Deodar cedar	UPL
Centaurea calcitrapa	Purple star-thistle	UPL
Centaurea solstitialis	Yellow star-thistle	UPL
Chenopodium album	Lamb's quarters	FACU
Chondrilla juncea	Skeleton weed	UPL
Cirsium vulgare	Bull thistle	FACU
Clarkia unguiculata	Woodland clarkia	UPL
Conium maculatum	Poison hemlock	FACW
Croton setiger	Turkey mullein	UPL
Cynodon dactylon	Bermuda grass	FACU
Cynosurus echinatus	Hedgehog grass	UPL
Cyperus eragrostis	Tall flatsedge	FACW
Daucus carota	Queen Anne's lace	UPL
Dichelostemma capitatum	Blue dicks	FACU
Digitaria sanguinalis	Hairy crabgrass	FACU
Diplacus aurantiacus	Sticky monkeyflower	FACU
Dittrichia graveolens	Stinkwort	UPL
Epilobium brachycarpum	Panicled willowherb	FAC
Epilobium densiflorum	Denseflower willowherb	FACW
Erigeron canadensis	Horseweed	FACU
Erodium botrys	Filaree	FACU

Erythranthe cardinalis	Cardinal monkey flower	FACW
Eschscholzia californica	California poppy	UPL
Eucalyptus globulus	Blue gum	UPL
Euthamia occidentalis	Western goldenrod	FACW
Festuca perennis	Perennial ryegrass	FAC
Ficus carica	Common fig	FACU
Foeniculum vulgare	Fennel	UPL
Galium aparine	Sticky willy	FACU
Helianthella californica	California helianthella	UPL
Heteromeles arbutifolia	Toyon	UPL
Hirschfeldia incana	Tumble mustard	UPL
Holocarpha virgata	Narrow tarplant	UPL
Hordeum marinum	Mediterranean barley	FAC
Hordeum murinum	Wall barley	FACU
Hypericum perforatum	Klamath weed	FACU
Ipomoea purpurea	Common morning-glory	-
Juncus balticus	Baltic rush	FACW
Juncus bufonius	Toad rush	FACW
Lactuca serriola	Prickly lettuce	FACU
Leontodon saxatilis	Hairy hawkbit	FACU
Lotus corniculatus	Bird's foot trefoil	FAC
Ludwigia peploides	Floating primrose willow	OBL
Lysimachia arvensis	Scarlet pimpernel	FAC
Lythrum hyssopifolia	Hyssop loosestrife	OBL
Medicago polymorpha	California burclover	FACU
Mentha pulegium	Pennyroyal	OBL
Morus alba	White mulberry	FACU
Nicotiana acuminata	Manyflower tobacco	UPL
Olea europaea	Olive	UPL
Paspalum dilatatum	Dallis grass	FAC
Persicaria lapathifolia	Common knotweed	FACW
Phoenix canariensis	Canary island date palm	UPL
Phyla nodiflora	Turkey tangle frogfruit	FACW
Phytolacca americana	Poke weed	FAC
Pinus sabiniana	Grey pine	UPL
Plantago lanceolata	English plantain	FAC
Plantago major	Common plantain	FAC
Polygonum aviculare	Prostrate knotweed	FAC
Polypogon monspeliensis	Rabbitsfoot grass	FACW
Populus fremontii	Fremont cottonwood	FAC
Portulaca oleracea	Common purslane	FAC
Proboscidea lutea	Yellow devil's claw	UPL
Prunella vulgaris	Common selfheal	FACU
Prunus dulcis	Almond	UPL
Pteridium aquilinum var. *pubescens*	Bracken fern	FACU

Pyrus calleryana	Callery pear	UPL
Quercus douglasii	Blue oak	UPL
Quercus kelloggii	Black oak	UPL
Quercus lobata	Valley oak	FACU
Quercus wislizeni	Interior live oak	UPL
Robinia pseudoacaria	Black locust	FACU
Rubus armeniacus	Himalayan blackberry	FAC
Rumex conglomeratus	Green dock	FACW
Rumex crispus	Curly dock	FAC
Salix babylonica	Weeping willow	FAC
Salix exigua	Sandbar willow	FACW
Salix gooddingii	Goodding's black willow	FACW
Salix laevigata	Red willow	FACW
Salix lasiolepis	Arroyo willow	FACW
sequoia sempervirens	Coast redwood	-
Silybum marianum	Milk thistle	UPL
Sonchus asper	Spiny sowthistle	FAC
Stipa pulchra	Purple needle grass	UPL
Torilis arvensis	Tall sock-destroyer	UPL
Toxicodendron diversilobum	Poison oak	FACU
Tribulus terrestris	Puncture vine	UPL
Trichostema lanceolatum	Vinegar weed	FACU
Trifolium hirtum	Rose clover	UPL
Trifolium incarnatum	Crimson clover	UPL
Trifolium repens	White clover	FACU
Typha angustifolia	Narrow leaf cattail	OBL
Verbascum blattaria	Moth mullein	UPL
Verbascum thapsus	Woolly mullein	FACU
Vitis californica	California grape	FACU
Xanthium spinosum	Spiny cockleburr	FACU
Zeltnera muehlenbergii	Muehlenberg's centaury	FAC

Attachment D

Representative Site Photographs



Data Point DP-3 – 1 July 2020



Antelope Canal, facing southeast – 30 June 2020



Roadside Ditch (RD-1), facing west – 1 July 2020



Ruderal Habitat, facing southwest – 1 July 2020



Unvegetated Ruderal, facing northeast – 30 June 2020



Dirt Roads within the Ruderal Area, facing southwest – 30 June 2020



Annual Grassland, facing southeast – 30 June 2020



Oak woodland, facing southeast – 30 June 2020

Attachment E

GIS Shapefiles and the Aquatic Resources Excel Spreadsheet (on CD)

Attachment F

Access Letter

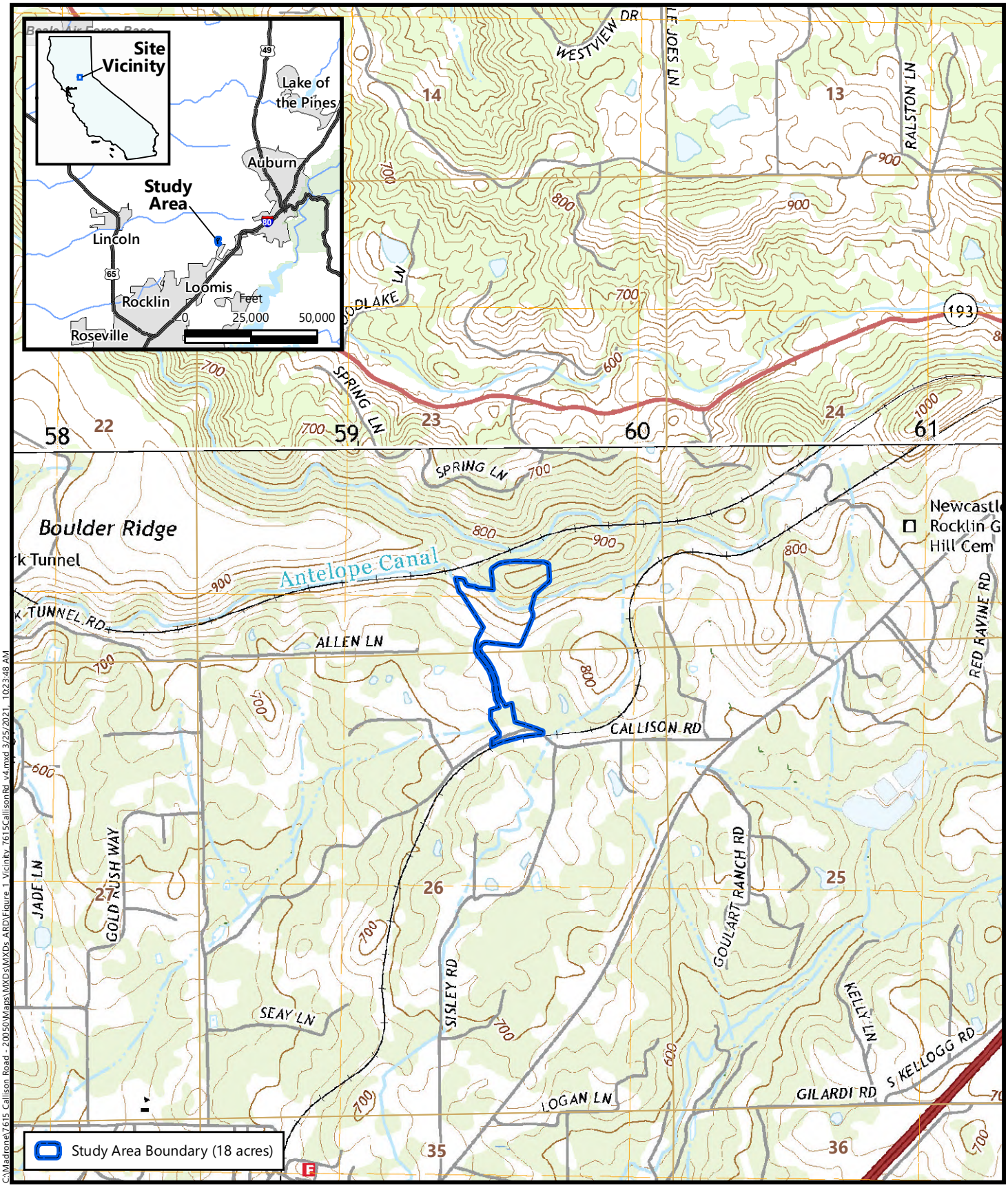
Project Manager
Regulatory Division
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814-2922

Re: 7615 Callison Road Property

This letter serves as written permission to enter the 7615 Callison Road Property shown on the attached **Figure 1** when accompanied by Madrone Ecological Consulting, LLC (Madrone) staff. When accompanied by Madrone staff, you may dig soil pits by hand and collect plant materials related to the verification of potential Waters of the U.S. on the 7615 Callison Road Property. If you have any questions, please contact Ben Watson at Madrone (916) 822-3230 or bwatson@madroneeco.com.

Sincerely,

Evan Mackenzie



N

Feet
0 750 1,500

Source: United States Geologic Survey, 2018.
Sections 23 and 26, Township 12 North, Range 7 East, MDB&M
"Rocklin, California" 7.5-Minute Topographic Quadrangle
Longitude -121.160895, Latitude 38.869051

Figure 1
Site and Vicinity

7615 Callison Road
Placer County, California

MADRONE ECOLOGICAL CONSULTING

APPENDIX F

California Tree and Landscape Consulting, Inc.

April 14, 2021

Mr. Evan Mackenzie, Engineering Manager & Mr. Tim Tull Senior Engineer
Building Engineering & Management
Engineering/Surveying/Planning
4780 Rocklin Road
Rocklin, CA 95677

OAK RESOURCES TECHNICAL REPORT

RE: BEM Project 08, APNs: 031-220-061-000, 032-124-080-000, 032-124-044-000, Placer County, California

Executive Summary

Mr. Tim Tull of Building Engineering & Management (BEM) contacted California Tree and Landscape Consulting, Inc. to perform an inventory and impact analysis on Oak Woodlands for a proposed development at 7615 Callison Road, Penryn. Our assignment is to evaluate the trees on the site within the development area as shown on the development plans and provide documentation of the inventoried trees and a canopy assessment for purposes of obtaining a building permit. This is a Preliminary Arborist Report for the initial filing of plans to develop the property. A more in-depth report evaluating individual tree impacts and preservation measures should be produced for submittal with the grading plans. The property is located on Callison Road, in Penryn, California, and falls under the jurisdiction of Placer County. See Appendix 1 – Tree Location Maps.

Nicole Harrison, ISA Certified Arborist #WE-6500AM, Gordon Mann, ISA Certified Arborist #WE-0151AM, and R. Cory Kinley, ISA Certified Arborist #WE-9717A, were on site over the dates of July 7, 8, 9, 28, 29, 30, 31, and August 1, 2020 to evaluate the trees within the development areas and assess the parcel conditions to support the canopy study. Three additional trips were made to the site to collect additional tree data when the project scope was modified in January, February and March of 2021. Note that not all trees on the parcel were surveyed. Portions of the three parcels were designated as 'not included' in the development proposal.

Findings

The parcel was found to contain 8.19 acres of Oak Woodlands, of which 7.342 acres were included in the study. The study area has 537 total trees of mixed native oak and other native species and 49 trees that are undersized or not native to the area[1]. The final conceptual development plans were provided by Building Engineering & Management Inc. on March 8, 2021[2]. A total of 5.012 acres are proposed to be removed or impacted.

[1] Eucalyptus globulus, Juglans regia, Prunus sp., Pyrus sp., Sequoia sempervirens
[2] MS_ETA-MS Conceptual_PW_20076_site.pdf

Chart of Total Protected Native Trees 6" in Diameter and Greater in Inventory

Tree Species (Does Not Include Significant Trees)	Trees Inventoried	Total Diameter Inches		Significant Trees	Trees Inventoried	Total Diameter Inches
Blue Oak, *Quercus douglasii*	186	2336		Blue Oak, *Quercus douglasii*	12	334
Interior Live Oak, *Quercus* wislizeni	211	2910		Interior Live Oak, *Quercus* wislizeni	33	1128
Valley Oak, *Quercus lobata*	7	108		Valley Oak, *Quercus lobata*	1	27
California Black Oak, *Quercus kelloggii*	41	469		California Black Oak, *Quercus kelloggii*	4	125
Oracle Oak *Quercus morehus*	1	13				
California Buckeye *Aesculus californica*	6	64				
Incense Cedar *Calocedrus decurrens*	12	101				
Ponderosa Pine *Pinus ponderosa*	5	81		Ponderosa Pine *Pinus ponderosa*	1	26
Grey Pine *Pinus sabiniana*	16	214				
Douglas fir *Pseudotsuga menziezii*	1	8				
	486	**6304**			**51**	**1640**

See Appendix 4 for the entire tree inventory data.

Tree Removals and Impacts (Trees inside the Grading Area)

Tree Species (Does Not Include Significant Trees)	Trees Inventoried	Total Diameter Inches[3]		Significant Trees	Trees Inventoried	Total Diameter Inches
Blue Oak *Quercus douglasii*	46	580		Blue Oak *Quercus douglasii*	4	114
Interior Live Oak *Quercus* wislizeni	91	1184		Interior Live Oak *Quercus* wislizeni	14	519
Valley Oak *Quercus lobata*	6	95		Valley Oak *Quercus lobata*	1	27
California Black Oak *Quercus kelloggii*	1	6		California Black Oak *Quercus kelloggii*	-	-
Oracle Oak *Quercus x morehus*	1	13				
California Buckeye	3	41				

[3] Total Diameter Inches includes trees which are in poor condition and may not require mitigation. See Mitigation for Oak Woodland Canopy Loss and Diameter Loss Comparison below for mitigation figures.

Tree Species (Does Not Include Significant Trees)	Trees Inventoried	Total Diameter Inches[3]		Significant Trees	Trees Inventoried	Total Diameter Inches
Aesculus californica						
Incense Cedar *Calocedrus decurrens*	12	52				
Ponderosa Pine *Pinus ponderosa*	4	59		Ponderosa Pine *Pinus ponderosa*	1	26
Grey Pine *Pinus sabiniana*	2	30				
Douglas fir *Pseudotsuga menziezii*	-	-				
	166	**2060**			**20**	**686**

Mitigation for Oak Woodland Canopy Loss and Diameter Loss Comparison

		Protected Trees	Significant Trees	Total Trees
Individual Native Oak Trees[4]				
Proposed Individual Native Trees to be Removed		31	2	33
Total Inches		376	57	433
Cost Per Inch	$100	$37,600	$5,700	$43,300

Oak Woodlands		
Total Property Oak Woodland Acreage		8.19
Acreage of Woodlands to be Impacted or Removed		5.02
Cost Per Acre	$24,000	$120,480

MITIGATION AND COMPENSATION

Mitigation for oak woodland losses within the development footprint must be achieved off-site. No credit is provided for oak woodland preserved on-site. However, with creative site planning, the requirements for mitigation can be reduced. For every acre of woodland lost to development, two acres of the same woodland type must be provided off-site.

Two options are available. With County consent, the project applicant or project sponsor may dedicate to private or public ownership one or more areas equivalent to twice the area of oak woodland lost. These areas must be acceptable to the County as being equivalent (or better) in quality to the oak woodlands lost. In addition to the donation of land, an endowment for management must be provided. The County in consultation with the designated owner/manager will determine the amount of the endowment.

The second option is for the project applicant or project sponsor to make an in lieu payment to the County of $24,000 for each acre of oak woodland lost. This payment is equivalent to the general land value of oak woodland properties in the County as of 2007 ($12,000/acre) with 2 acres replaced for each acre lost. These funds will be used by the County to purchase conservation easements or fee title to other oak woodlands in the County. A proportion of the funds will be set-aside as an endowment for managing the preserved property.

The per tree diameter inch mitigation calculates the total number of diameter inches removed and the in lieu fee is $100 per diameter inch for trees in fair or better condition.

[4] Trees which mitigation will be applied. Placer County allows removal of trees in poor condition without mitigation.

METHODS

The trees evaluated as part of this report have a numbered tag that was placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: CALTLC, Auburn, CA with 1/4" pre-stamped tree number and Tree Tag. Unless otherwise noted, they are attached with a nail extending out beyond the tag, installed at approximately 6 feet above ground level on the approximate north side of the tree. The tag should last ~5-8+ years depending on the species and rainfall, before it is enveloped by the trees' enlarging growth of the trunk diameter.

A 360-degree Basic Visual Assessment was performed in accordance with the International Society of Arboriculture's best management practices when individual trees were evaluated and included in the Tree Collection Data. This assessment level is limited to the observation of conditions and defects which are visible from the ground and access to the tree. Limiting factors, such as blackberries, poison oak, vines, and/or debris piled at the base of a tree can inhibit the visual assessment. Trees with limiting factors and trees on adjacent properties or with restricted access were visually assessed from one or as many sides as possible for conditions and defects.

Tree Location: The approximate GPS location of each tree was collected using the ESRI's ArcGIS collector application on a mobile device. The data was then processed in ESRI's ArcMap by Julie McNamara, M.S. GISci, to produce the tree location map.

Tree Measurements: DBH (diameter breast high) is normally measured at 4.5' above the ground grade. If the trunk has co-dominant leaders, low laterals, or growth conditions that do not allow the accurate measurement at 4.5' above grade, the height where the diameter is measured is noted. A Swedish caliper, Biltmore Stick, or a diameter tape were used to measure the DBH. A Stanley laser distance meter, Nikon hypsometer, or pacing were used to measure distances for canopy radius unless obstructions to the line of sight or steep slope inhibited measure or access, in which case, distances were estimated.

TERMS

Field Tag #	The pre-stamped tree number on the tag which is installed at approximately 6 feet above ground level on the north side of the tree.
Map #	If development plans show tree locations with a number other than the field tag, it will be listed here. CalTLC are not surveyors and errors in determination of which tree onsite matches the plan location can occur.
Species	The species of a tree is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case). Oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest characteristics.
DBH	Diameter breast high' is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted in the next column "measured at"
Canopy radius	The farthest extent of the crown composed of leaves and small twigs. Most trees are not evenly balanced. This measurement represents the longest extension from the trunk to the outer canopy. If the tree is leaning, the extent of the lean is not the dripline distance and the lateral branch extension is the dripline radius measurement. The dripline measurement is from the center point of the tree and is shown on the Tree Location Map as a circle. This measurement can further define a protection zone or can indicate if pruning may be required for development.
Protected Root Zone	The industry best management practices indicate the protected root zone should be a circle equal to a range from 6 to 18 times the trunk diameter inches converted to feet, based on the factors assessed by the arborist which may include age, vitality, species tolerance to development impacts, and the extent of development inpacts. In instances where a tree is multi-stemmed, the protected root zone is calculated by using the extrapolated diameter if the tree were single stemmed.

Arborist Rating

Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

Rating #0: This indicates a tree that has no significant sign of life.
Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.
Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, risk of failure may be reduced and the rating may be elevated to a 3 depending on the type and location of defects. If no action is taken the tree is considered a risk liability and should be removed.
Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or and risk reduced.
Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future risk of branch or tree failure can be reduced and more serious health problems can be averted.
Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

Arborist Ratings

No problem(s)	Excellent	**5**
No apparent problem(s)	Good	**4**
Minor problem(s)	Fair	**3**
Major problem(s)	Poor	**2**
Extreme problem(s)	Hazardous	**1**
Dead	Dead	**0**

Notes: Provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; (c) condition of branches and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed (for example - why dbh may have been measured at a location other than the standard 54"). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

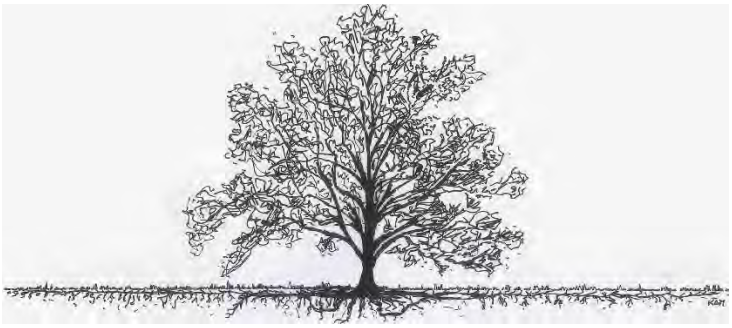
DISCUSSION

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on standard industry practices and experience. This requires their root zones remain intact and viable, despite the use of heavy equipment and the need to install foundations,

driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil can have serious consequences for tree health. Tree Protection measures should be incorporated into the site plans in order to protect the trees. Once the plans are approved, they become the document that all contractors will follow.

Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy. An example of a root structure of a tree is in the drawing below. All plants' roots need both water and air for survival. Poor canopy development or canopy decline in mature trees after development is often the result of inadequate root space and/or soil compaction. The actual shape, depth, extent, and health of the root system depends on the site and soil conditions, how much supplemental irrigation the tree receives, and compaction and mulch or duff layers covering the soil. The optimum way to learn where the roots are in relation to proposed development is to carefully excavate a sample trench in the soil and observe the roots in the areas where development is proposed, and protect what is found accordingly.



Arborist Classifications

It is helpful to know the different types of Arborists when procuring tree work. There are 4 basic categories of which define the type and quality of work.

Tree Removal and/or Pruning Companies: These companies may be licensed by the State of California Contractr's State License Board to do business, but they do not necessarily have extensive knowledge about caring for trees;

Arborists: Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

ISA Certified Arborist: An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to demonstrate specialized knowledge of trees. An arboristls certification can be verified at the International Society of Arboriculture website: www.treesaregood.org/findanarborist/verify.

Consulting Arborist: An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. A Registered Consulting Arborists can be verified at the American Society of Consulting Arborists website: www.asca-consultants.org/search/custom.asp?id=3818

RECOMMENTATIONS: SUMMARY OF TREE PROTECTION MEASURES

The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed.

- Identify the Root Protection Zones on the final construction drawings and show the placement of tree protection fencing pursuant.
- The project arborist should inspect the fencing prior to grading and/or grubbing for compliance with the recommended protection zones.
- Identify the areas to be irrigated, fertilized and mulched on the final construction drawings and tree with recommended chemical treatments pursuant to the project arborist's recommendations.
- The project arborist should directly supervise the irrigation, fertilization, placement of mulch and chemical treatments.
- All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. **No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment**.
- Prior to any grading, or other work on the site that will come within 50' of any tree to be preserved, irrigation will be required from April through September and placement of a 4-6" layer of chip mulch over the protected root zone of all trees that will be impacted. Chips should be obtained from onsite materials and trees to be removed.
- Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Design utility and irrigation trenches to minimize disturbance to tree roots. Where possible, dig trenches with a hydraulic or air spade, placing pipes underneath the roots, or bore the deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

Report Prepared by:

Nicole Harrison
ISA Certified Arborist #WC-6500AM, TRAQ
Member: American Society of Consulting Arborists

Gordon Mann
ISA Certified Arborist #WC-0151AM, TRAQ
ASCA Registered Consulting Arborist #480

Appendix 1 - **Oak Woodland Aerial & Approximate Tree Location Map**
Appendix 2 - **Canopy Calculations showing significant tree locations**
Appendix 3 – **Tree List of Impacted Trees in Fair + Condition**
Appendix 4 – **Significant Trees**

Appendix 5 – **Tree Inventory (in its entirety)**

Bibliography

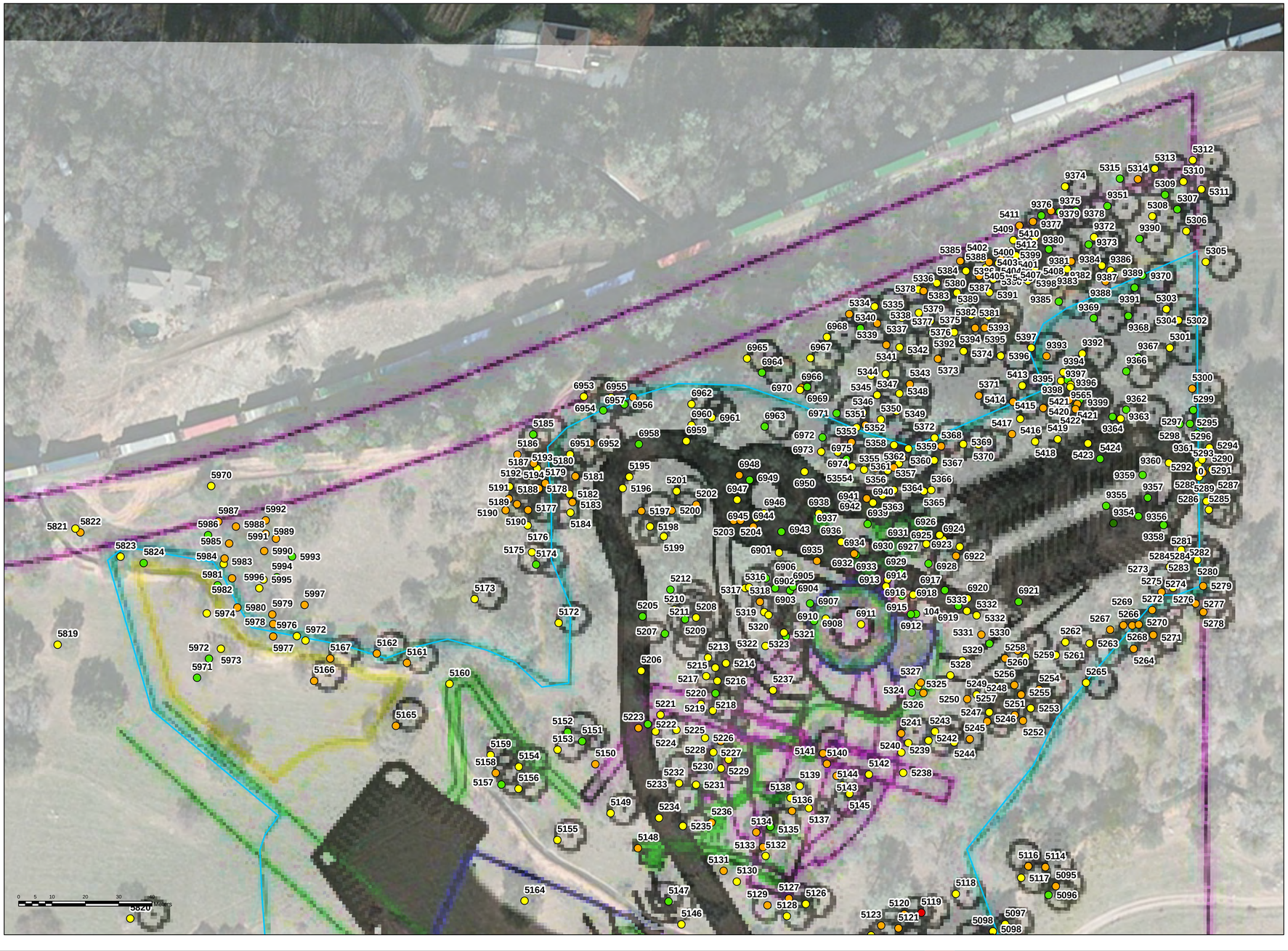
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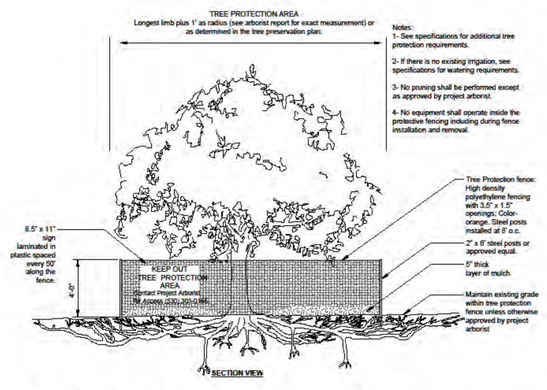


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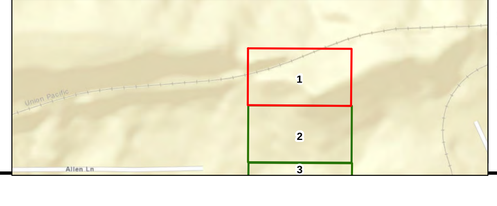
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TREE PRESERVATION PLAN



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Property Line
Project Boundary

Arborist Conditions Rating

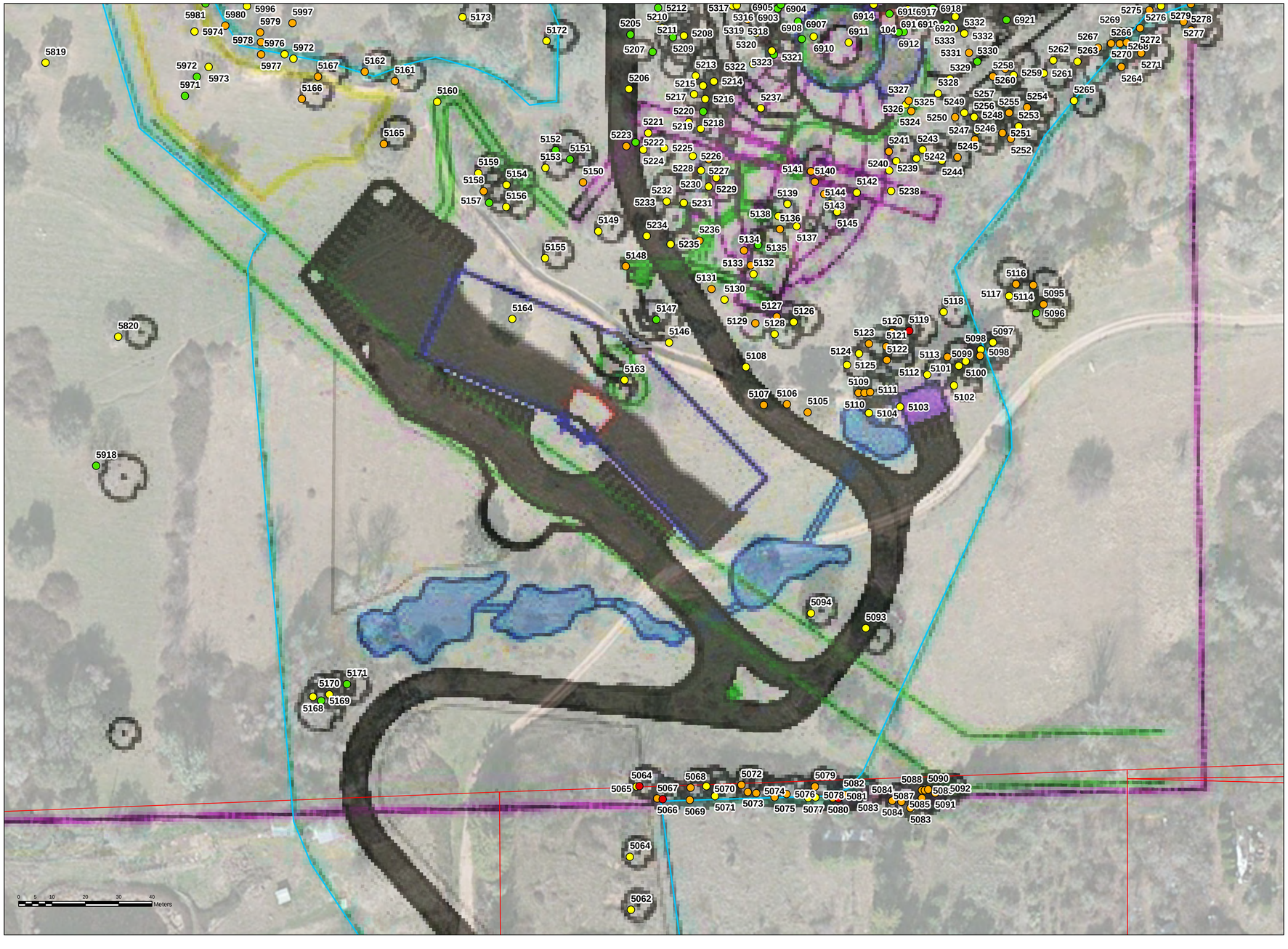
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- 1 Extreme Structure or Health Problems
- 2 Major Structure or Health Problems
- 3 Fair - Minor Problems
- 4 Good - No Apparent Problems

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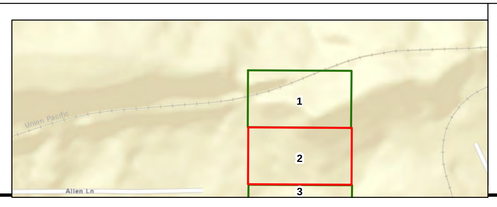
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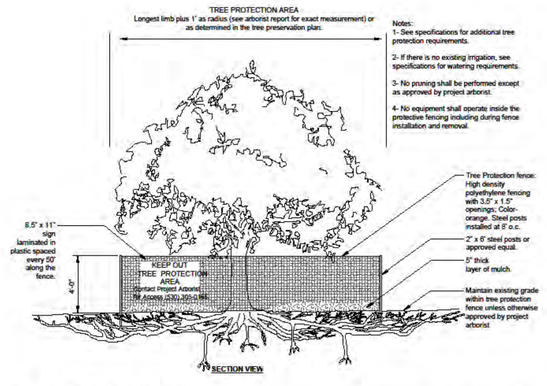
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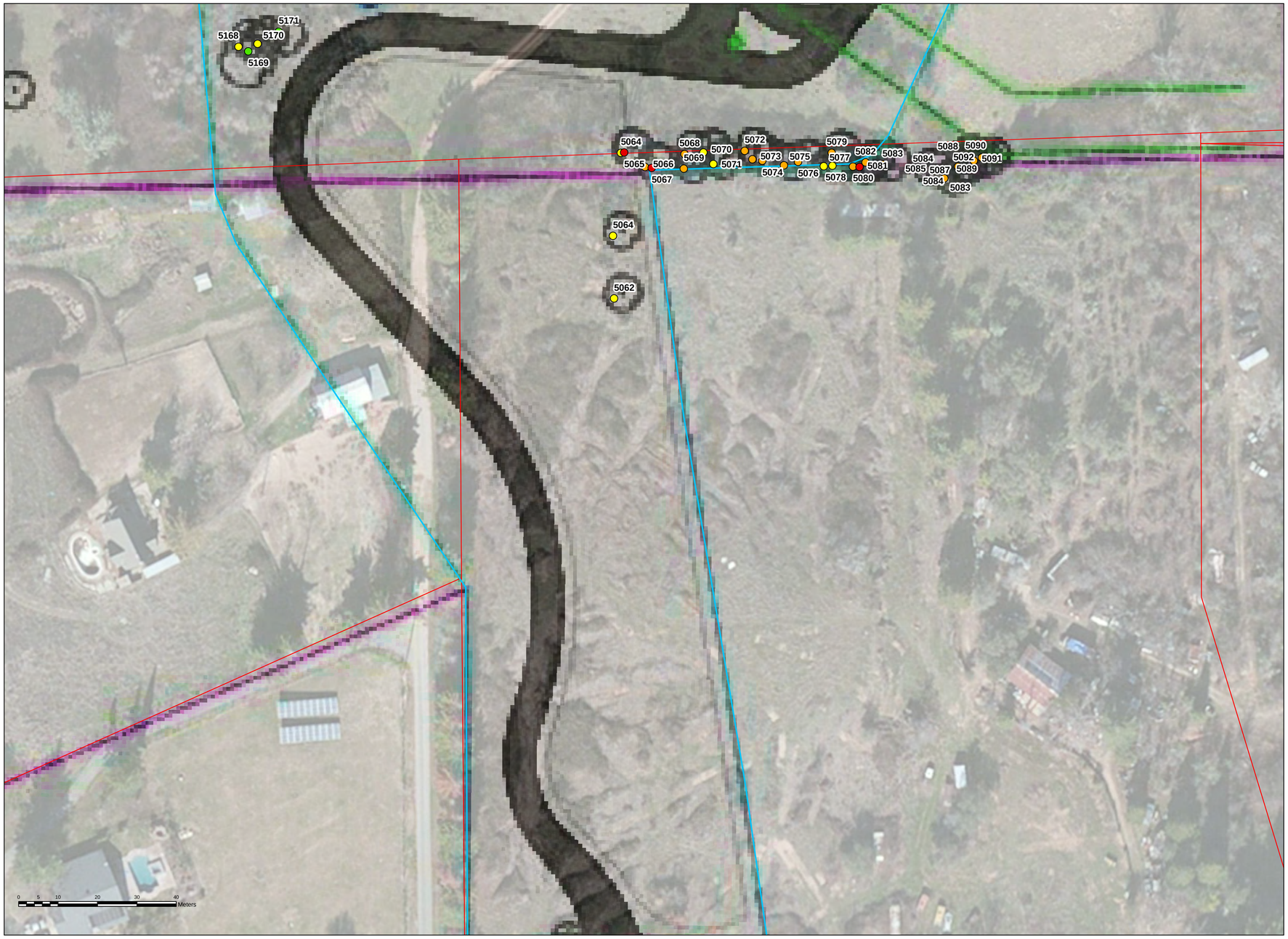
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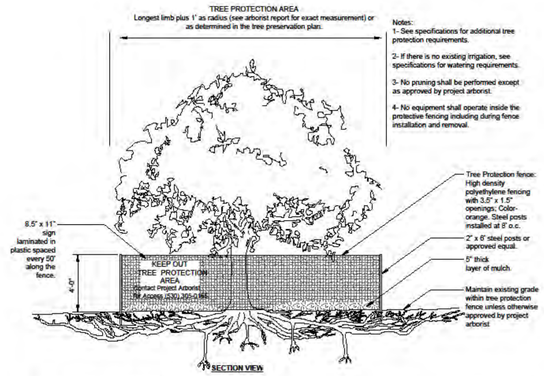


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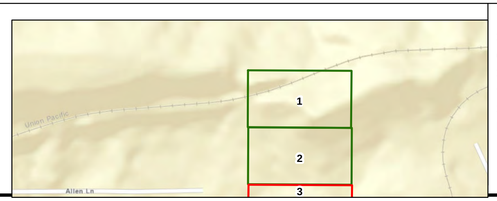


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Property Line
Project Boundary

Arborist Conditions Rating

- 0 Dead
- 1 Extreme Structure or Health Problems
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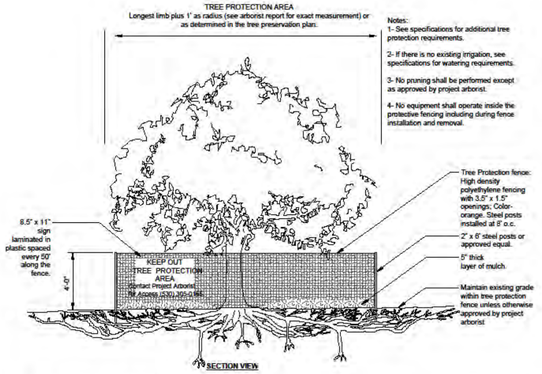


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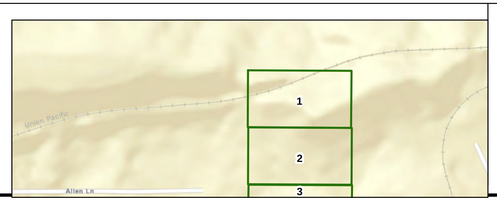


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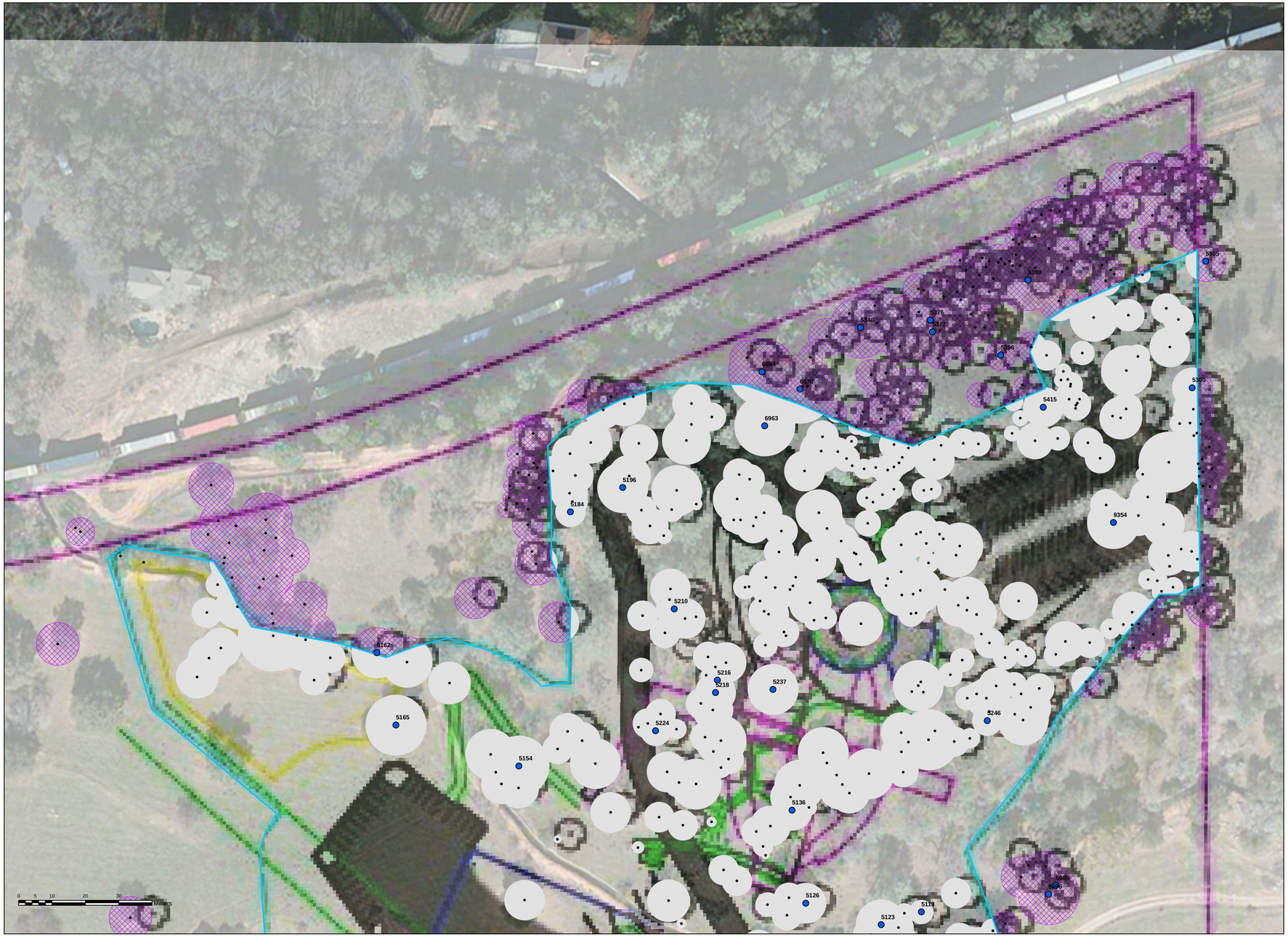
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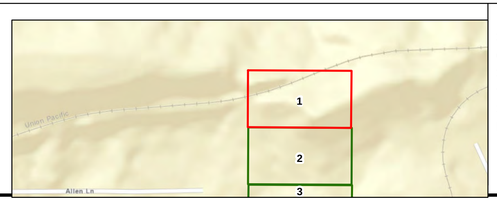
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TREE CANOPY ANALYSIS

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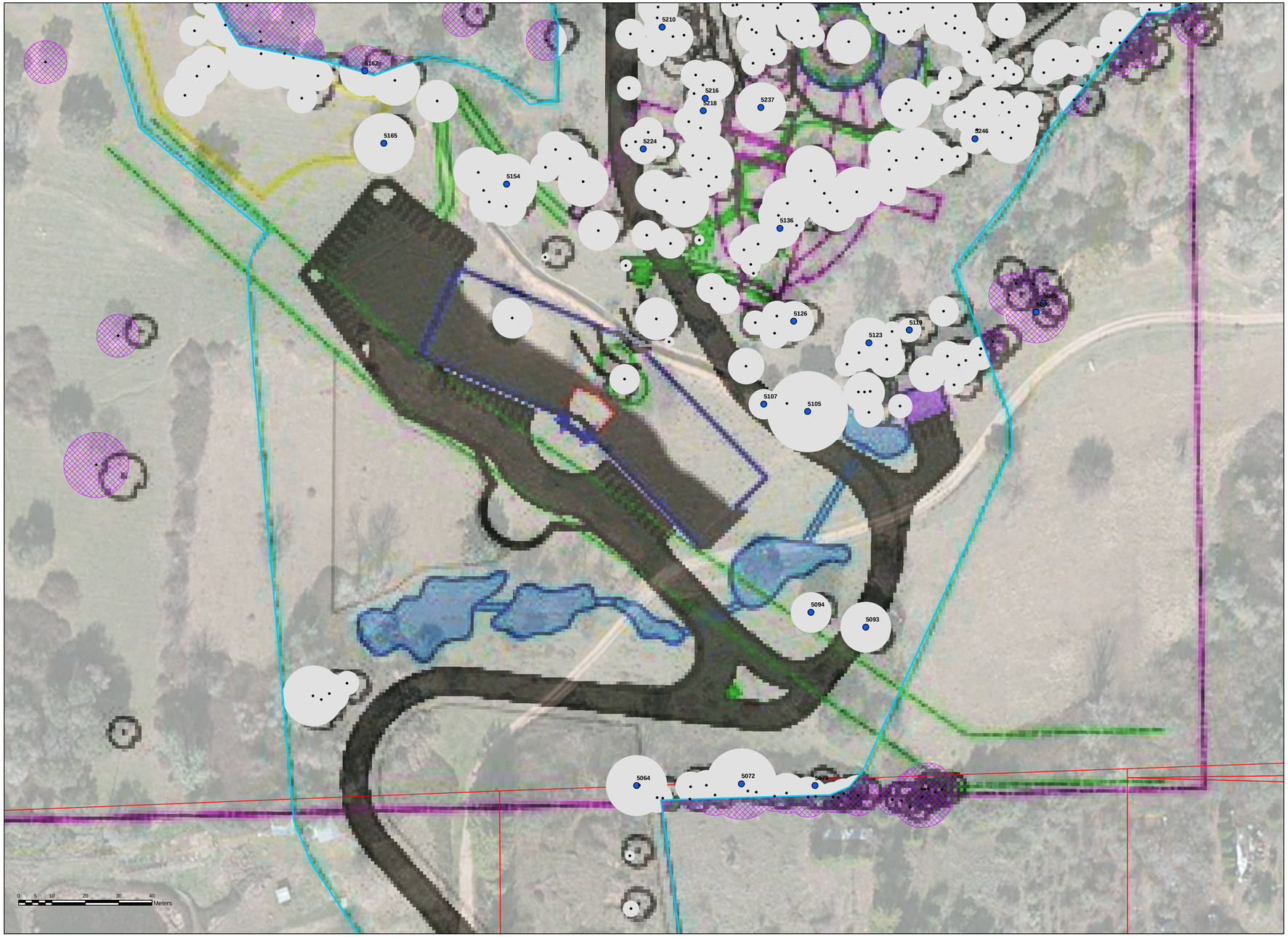
	Significant to the Site
Property Line	
Project Boundary	
Retain Oak Canopy	No
Remove Oak Canopy	Yes

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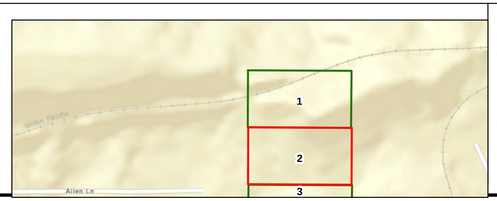
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TREE CANOPY ANALYSIS

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	Significant to the Site
Property Line	
Project Boundary	
Retain Oak Canopy	• No
Remove Oak Canopy	● Yes

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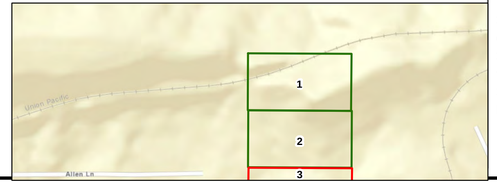
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Property Line	**Significant to the Site**
Project Boundary	• No
Retain Oak Canopy	● Yes
Remove Oak Canopy	

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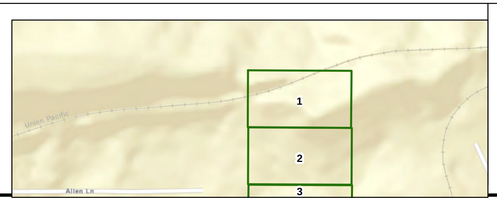
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	Significant to the Site
Property Line	• No
Project Boundary	● Yes
Retain Oak Canopy	
Remove Oak Canopy	

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Appendix 3 List of impacted Trees in Fair + condition

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5057		Yes		Blue Oak	Quercus douglasii	6	6	54	5	3 Fair - Minor Problems	6	yes	Upright structure nice scaffolding. Low 4" lateral at base Southwest
5169		Yes		Valley Oak	Quercus lobata	16.0	16.0	54	20	3 Fair - Minor Problems	16	yes	Upright structure Codominant at 20'.
5171		Yes		Valley Oak	Quercus lobata	13.0	13.0	54	12	3 Fair - Minor Problems	13	yes	Upright structure Codominant at 12'.
5296		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	8	3 Fair - Minor Problems	9	yes	Suppressed above average dead branches lower canopy vigor and density fair to poor
5298		Yes		Blue Oak	Quercus douglasii	8.0	8.0	54	10	3 Fair - Minor Problems	8	yes	Vertical structure good scaffolding up a corpsman growth in upper canopy vigor and density
5299		Yes		Blue Oak	Quercus douglasii	21.0	21.0	54	20	3 Fair - Minor Problems	21	yes	Call dumb at 15'. Above average dead branches appears to be Short twig elongation. Vigor and density fair to poor
5424		Yes		Blue Oak	Quercus douglasii	13	13	54	15	3 Fair - Minor Problems	13	y	Vertical structure Codominant at 20' bigger and density fair
5824		Yes		Interior Live Oak	Quercus wislizenii	13	13	24	16	3 Fair - Minor Problems	13	Y	Codominant at 4', growing above canal
5971		Yes		Blue Oak	Quercus douglasii	19	19	54	21	3 Fair - Minor Problems	19	Y	Codominant at 6'
5972		Yes		Valley Oak	Quercus lobata	13	13	54	21	3 Fair - Minor Problems	13	Y	
6939		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	13	3 Fair - Minor Problems	9	yes	vertical growth, small dead branches

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6949		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	15	3 Fair - Minor Problems	8	yes	Bending trunk West and South self correcting, co dom at 20', dead branches to 2"
6954		Yes		Oracle Oak	Quercus x morehus	13.6	13.6	54	19	3 Fair - Minor Problems	14	Impacted	Straight trunk, low lateral South, mistletoe
6956		Yes		Blue Oak	Quercus douglasii	13.9	13.9	54	22	3 Fair - Minor Problems	14	**Impacted**	Slight lean South self correcting, co dom at 9', dead branches to 4"
6958		Yes		Blue Oak	Quercus douglasii	11.6	11.6	42	19	3 Fair - Minor Problems	12	yes	Trunk going North, CO dom at 10', dead branches to 2"
6963	Yes	Yes		Interior Live Oak	Quercus wislizenii	26.1	26.1	54	30	3 Fair - Minor Problems	26	yes	Straight trunk, codom at 16', end wts, dead branches to 2"
6972		Yes		Interior Live Oak	Quercus wislizenii	9.7	9.7	54	16	3 Fair - Minor Problems	10	yes	Leans Southwest, small dead branches to 2",
6975		Yes		Blue Oak	Quercus douglasii	7.4	7.4	54	13	3 Fair - Minor Problems	7	yes	Top leans South at 20', small dead branches the 2", bends in trunk,5.6" ilo 14' NE downhill no tag
9354	Yes	Yes		Blue Oak	Quercus douglasii	18, 13	31.0	54	26	4 Good - No Apparent Problems	31	yes	Codominant at ground, smaller stem leans, fair vigor
9355		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	16	3 Fair - Minor Problems	15	yes	Narrow codom at 7' fair canopy
9356		Yes		Blue Oak	Quercus douglasii	17.0	17.0	54	20	3 Fair - Minor Problems	17	yes	Mostly one-sided canopy se
9357		Yes		Blue Oak	Quercus douglasii	15.0	15.0	24	18	3 Fair - Minor Problems	15	yes	sparse in upper canopy, epicormic sprouting
9358		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	21	3 Fair - Minor Problems	16	yes	Moderate decline in canopy likely due to new road cut
9361		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	14	3 Fair - Minor Problems	10	yes	

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
9362		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	36	16	3 Fair - Minor Problems	8	yes	
9364		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	12	3 Fair - Minor Problems	12	yes	Narrow attachment at 6'
9365		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	15	3 Fair - Minor Problems	12	yes	2 to 3" limb die back in lower canopy
9366		Yes		Interior Live Oak	Quercus wislizenii	18.0	18.0	54	25	3 Fair - Minor Problems	18	yes	Low laterals, will need clearance pruning within canopy zone
9367		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	12	3 Fair - Minor Problems	10	yes	
9368		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	18	16	3 Fair - Minor Problems	11	yes	Low laterals
9369		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	24	3 Fair - Minor Problems	16	yes	
9370		Yes		Blue Oak	Quercus douglasii	6.0	6.0	18	8	3 Fair - Minor Problems	6	yes	
9396		Yes		California Black Oak	Quercus kelloggii	6.0	6.0	54	8	3 Fair - Minor Problems	6	yes	
							433.3						

Appendix 4 – **Significant Trees**

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
1540	Yes	Yes	Yes	Blue Oak	Quercus douglasii	28	28	54	29	3 Fair - Minor Problems	28		Codominant at 8 ft with included bark
5035	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,11,9	33	54	25	2 Major Structure or Health Problems	0	yes	Codominant at base three stems. Located 4' adjacent to Callison road north
5037	Yes	Yes		Interior Live Oak	Quercus wislizenii	17, 14, 9	40	54	30	2 Major Structure or Health Problems	0	yes	Growing into canopies east and west. Codominant at base three stems. Located 6' adjacent from Callison road north
5039	Yes	Yes		Interior Live Oak	Quercus wislizenii	27	27	54	30	3 Fair - Minor Problems	27	No	Low 16" lateral east at 12". Average amount of dead branches in lower canopy. Located 3' adjacent to Callison Rd., North
5064	Yes	Yes		Valley Oak	Quercus lobata	27	27	54	30	2 Major Structure or Health Problems	0	yes	Codominant at 15'. Pruned Southside for powerline. Above average deadwood in canopy
5072	Yes	Yes		Interior Live Oak	Quercus wislizenii	16,13	29	54	35	1 Extreme Structure or Health Problems	0	yes	Codominant at 12" two stems growing 90° north and south canopy on ground suppressed vigor poor
5093	Yes	Yes		Interior Live Oak	Quercus wislizenii	20, 18,11	49	54	25	2 Major Structure or Health Problems	0	yes	Codominant at 12" some inclusion. Road grading within drip line 15' from trunk West

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5094	Yes	Yes		Interior Live Oak	Quercus wislizenii	23,18	41	54	20	2 Major Structure or Health Problems	0	yes	Codominant stands at base leaning north and south. DK in trunk between two stems.
5107	Yes	Yes		Interior Live Oak	Quercus wislizenii	16,10	26	54	15	1 Extreme Structure or Health Problems	0	yes	Trunk and canopy lean south Codominant at 12" severe inclusion and some separation
5119	Yes	Yes		Blue Oak	Quercus douglasii	34	34	54	12	0 Dead	0	yes	Tree lost its top long ago. Severe decay cavity up to 36" trunk is 90% Hollow. Canopy consist only of wound sprouts
5123	Yes	Yes		Blue Oak	Quercus douglasii	25	25	54	25	1 Extreme Structure or Health Problems	0	yes	Codominant at 6'. Serious decline in canopy severe dead branches. 40% of foliage remaining. Road grading to the north has added up to 4' of wash to root zone from trunk sloping up to a Distance of 8'.
5126	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,7,6,3	41	54	20	2 Major Structure or Health Problems	0	yes	Multi stems at base week attachments decay between stems at base. Significant leans on stems
5136	Yes	Yes		Interior Live Oak	Quercus wislizenii	17,13	30	54	20	1 Extreme Structure or Health Problems	0		Multi stem at base to stems significant inclusion severe leaning trunks and canopy west. Suppression larger stem DK cavity at 12" east

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5154	Yes	Yes		Blue Oak	Quercus douglasii	27	27	54	30	2 Major Structure or Health Problems	0	**No**	Canopy lean moderately south. Above average dead larger branches bigger fair to poor
5162	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,6,4,4	39	54	25	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments. Largest Stams lean south west. On the backside of all of the stems is decayed included bark from the other half of the tree that is no longer existing. DK at base
5165	Yes	Yes		Interior Live Oak	Quercus wislizenii	34	34	54	30	1 Extreme Structure or Health Problems	0	**No**	For large recent pruning cuts to the trunk smallest 12" largest 15" south east side. Severe mechanical branch tearing wounds mid and lower canopy west side
5182	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 10,5	27	54	18	2 Major Structure or Health Problems	0		Codominant at 12" three stems some inclusion. Suppressed Flower canopy
5184	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,7	33	54	15	2 Major Structure or Health Problems	0		Coco dumb at base suppression worst severe canopy lean
5196	Yes	Yes		Blue Oak	Quercus douglasii	12,11,10	33	54	25	2 Major Structure or Health Problems	0		Multi-stem at base east stem Codominant at 12" lower canopy suppressed mistletoe.

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5198	Yes	Yes		Interior Live Oak	Quercus wislizenii	12,10,4	26	54	18	2 Major Structure or Health Problems	0	**No**	Codominant at base. Low lateral on the east side of the center stem has grafted into Eastern stem at 24". Suppression growth can be leaning south west
5210	Yes	Yes		Blue Oak	Quercus douglasii	24	24	12	18	2 Major Structure or Health Problems	0	**No**	Codominant at 24" two stems
5216	Yes	Yes		Blue Oak	Quercus douglasii	13,11	24	54	15	2 Major Structure or Health Problems	0	**No**	Two stems that base growing into canopies north and south
5218	Yes	Yes		Blue Oak	Quercus douglasii	24	24	54	20	3 Fair - Minor Problems	24		Upright structure Codominant at 15'
5224	Yes	Yes		Blue Oak	Quercus douglasii	14,12	26	54	15	2 Major Structure or Health Problems	0	**No**	Two stems at 12". Growing into canopies east and west
5237	Yes	Yes		Blue Oak	Quercus douglasii	34	34	24	25	2 Major Structure or Health Problems	0		Codominant at 24" three stems. Some inclusion. Approximately 1 foot cavity on the internal side of the three stems doesnt appear to have a lot of decay.
5246	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,10,9,3,2	37	54	15	1 Extreme Structure or Health Problems	0		
5271	Yes	Yes		Interior Live Oak	Quercus wislizenii	12,11,8,8	39	54	15	1 Extreme Structure or Health Problems	0	No	Multi-stem that base week attachments suppression trunks and canopy lean

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5294	Yes	Yes		Interior Live Oak	Quercus wislizenii	11,9,4	24.0	54	15	2 Major Structure or Health Problems	0	No	Multi-stem at base week attachments some inclusion. Three stems trunk and canopy lean north
5300	Yes	Yes		Interior Live Oak	Quercus wislizenii	30	30	54	20	1 Extreme Structure or Health Problems	0	yes	Declining severely. 2 L west facing dead one failed included bark stem East fruiting bodies on the Kane Park north on trunk. One side is leaning canopy Southeast
5305	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,11,6, 5,2,2,2	54	54	20	2 Major Structure or Health Problems	0	yes	Multi-stem at base week attachments decay cavity at base north
5340	Yes	Yes		California Black Oak	Quercus kelloggii	24	24	54	30	3 Fair - Minor Problems	24	no	Vertical structure good scaffolding
5376	Yes	Yes		California Black Oak	Quercus kelloggii	19,8	27.0	54	25	2 Major Structure or Health Problems	0	No	Codominant base to stems larger stem is 19" diameter. Suppressed by larger tree trunk is 12" adjacent east. Suppressed trunk in canopy lean Northwest
5377	Yes	Yes		California Black Oak	Quercus kelloggii	26,22	48.0	54	30	3 Fair - Minor Problems	48	No	Codominant at base with inclusion. Smaller stem is 22" suppressed by main trunk leans severely self. Vigor and density fair

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5396	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,11	24	54	15	2 Major Structure or Health Problems	0	no	Codominant at base, 2 stems with inclusion, larger stem South severe lean, canopy on ground. Above average dead branches vigor and density fair to poor
5398	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,8	33	54	30	2 Major Structure or Health Problems	0	no	Codominant at 12", three stems suppressed, north trunk and canopies lean severely south
5415	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,11,10	47.0	54	20	1 Extreme Structure or Health Problems	0	y	Multi-stem at base week attachments severe inclusion. Above average dead branches lower canopy bigger and density Poor
5423	Yes	Yes		Interior Live Oak	Quercus wislizenii	10,9,9	28	54	15	2 Major Structure or Health Problems	0	y	Call down that base some inclusion growing into canopy self vigor and density fair
5823	Yes	Yes		Interior Live Oak	Quercus wislizenii	10, 18, 12	40	54	19	2 Major Structure or Health Problems	0	Y	3 leaders at 12"; 10,18,12, growing on edge of canal
5972	Yes	Yes		Interior Live Oak	Quercus wislizenii	11, 16, 8	35	24	31	2 Major Structure or Health Problems	0	y	(A) 3 stems at base, 11,8,16, above canal
5977	Yes	Yes		Blue Oak	Quercus douglasii	24.0	24.0	36	35	1 Extreme Structure or Health Problems	0	Y	Decay in trunk, cavity at 30-54"

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5979	Yes	Yes		Interior Live Oak	Quercus wislizenii	8,9,9,6,9	41.0	54	19	1 Extreme Structure or Health Problems	0	no	5 stems at base, stump sprouts
5983	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 6, 6	24.0	3	14	2 Major Structure or Health Problems	0	no	2 leaders at 12", 6&6, 1-sided crown
5985	Yes	Yes		Interior Live Oak	Quercus wislizenii	8, 12, 4, 3	27.0	54	21	1 Extreme Structure or Health Problems	0	no	4 stems at base, 8,12,4,3, stump sprouts, basal decay
5989	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 10, 8	30.0	54	18	1 Extreme Structure or Health Problems	0	no	3 stems at base, incl bark, 8&10 lean out
5990	Yes	Yes		Interior Live Oak	Quercus wislizenii	7,3,5,8,3,9, 4,5,7	51.0	54	15	1 Extreme Structure or Health Problems	0	no	10 stems at base, stump sprouts, basal decay,
5992	Yes	Yes		Interior Live Oak	Quercus wislizenii	18, 13, 3	34.0	54	26	1 Extreme Structure or Health Problems	0	no	3 stems at base, 18,13,3, basal decay, included bark, at fence line, barbed wire in trunk
6963	Yes	Yes		Interior Live Oak	Quercus wislizenii	26.1	26.1	54	30	3 Fair - Minor Problems	26	yes	Straight trunk, codom at 16', end wts, dead branches to 2"
6964	Yes	Yes		California Black Oak	Quercus kelloggii	26.8	26.8	54	33	3 Fair - Minor Problems	26	no	Straight trunk, full Crown slight lean Southeast, dead branches to 5"
6970	Yes	Yes		Interior Live Oak	Quercus wislizenii	29.5	29.5	3	34	2 Major Structure or Health Problems	0	no	Codominant at base 3 l at 18" -13", 11", 19", dead branches to 11 and thin foliage
9354	Yes	Yes		Blue Oak	Quercus douglasii	18, 13	31.0	54	26	4 Good - No Apparent Problems	31	yes	Codominant at ground, smaller stem leans, fair vigor

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
							1615.4						

Appendix 5 – **Tree Inventory (in its entirety)**

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
0		No		Blue Oak	Quercus douglasii	5.5	5.5	54	5	2 Major Structure or Health Problems	5.5	**No**	Vertical structure good scaffolding bigger and density fair
1540	Yes	Yes	Yes	Blue Oak	Quercus douglasii	28	28	54	29	3 Fair - Minor Problems	28		Codominant at 8 ft with included bark
1541	No	Yes	Yes	Blue Oak	Quercus douglasii	11	11	54	17	1 Extreme Structure or Health Problems	0		Canopy leans to the north, epicormic growth, deadwood, suppressed by neighboring trees
1542	No	Yes	Yes	Blue Oak	Quercus douglasii	22	22	54	18	3 Fair - Minor Problems	22		Old codominant cut on southside, multiple pruning cuts on southside, deadwood, tree declining
1543	No	Yes	Yes	Blue Oak	Quercus douglasii	17	17	54	17	3 Fair - Minor Problems	17		Most of canopy on southside early dormancy/decline
5001	No	No		Coast Redwood	Sequoia sempervirens	28	28	54	15	3 Fair - Minor Problems	28	yes	Located in the middle of the bank along the road north side of Callison Road 40° slope
5002		No		Coast Redwood	Sequoia sempervirens	22	22	54	12	3 Fair - Minor Problems	22	yes	Located in the middle of the bank off of Carlson Road 30° slope
5004	No	No		Coast Redwood	Sequoia sempervirens	30	30	54	15	3 Fair - Minor Problems	30	yes	Located 12' adjacent to Callison road north. On bank 10° slope.

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5005		Yes		Douglas Fir	Pseudotsuga menziesii	8	8	54	10	2 Major Structure or Health Problems	0	no	Suppressed above and south growing 10' adjacent to large redwoods.
5006		No		Coast Redwood	Sequoia sempervirens	6,4	10	54	5	2 Major Structure or Health Problems	10	yes	Volunteer located in between two large redwoods. Suppressed. Codominant at base
5007	No	No		Coast Redwood	Sequoia sempervirens	32	32	24	15	2 Major Structure or Health Problems	32	yes	Codominant at 4'. Tree located 10' adjacent to Collison road north.
5008	Yes	Yes		Ponderosa Pine	Pinus ponderosa	26	26	54	20	2 Major Structure or Health Problems	0	yes	Codominant at 30'. Located 15' adjacent to Collison road north.
5009		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	20	2 Major Structure or Health Problems	0	yes	Bark exfoliation west side from base to 24".
5010		Yes		Ponderosa Pine	Pinus ponderosa	22	22	54	20	3 Fair - Minor Problems	22	No	Upright structure 8" lateral west at 8'. Some pruning cuts on lower trunk southside.
5011		Yes		Interior Live Oak	Quercus wislizenii	10,9	19	54	30	2 Major Structure or Health Problems	0	yes	Codominant at base some inclusion. Leaning canopy south. Western Stan growing into tree to the west vigor and density fair to poor
5012		No		Coast Redwood	Sequoia sempervirens	22	22	54	18	3 Fair - Minor Problems	22	yes	Located 15' adjacent to Collison road north. On bank 10° slope.

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5013		Yes		Incense cedar	Calocedrus decurrens	8	8	54	5	2 Major Structure or Health Problems	0	yes	Suppressed located 6' adjacent to Colson Rd., North.
5014		Yes		Incense cedar	Calocedrus decurrens	7	7	54	5	2 Major Structure or Health Problems	0	yes	Suppressed Southside
5015		Yes		Ponderosa Pine	Pinus ponderosa	14	14	54	20	2 Major Structure or Health Problems	0	yes	Trunk Bows south at 10' and 20'. Tree lean, South lower canopy suppressed north and south.
5016		No		Deodar Cedar	Cedrus deodara	10	10	54	10	2 Major Structure or Health Problems	10	yes	Suppressed north west. Located 10' adjacent to Collis and Rd., North. On bank 5° slope.
5017		Yes		Ponderosa Pine	Pinus ponderosa	14	14	54	25	2 Major Structure or Health Problems	0	yes	Suppressed East severe leaning one-sided canopy west.
5019		No		Deodar Cedar	Cedrus deodara	6	6	54		2 Major Structure or Health Problems	6	yes	Suppressed. located 12' adjacent to Callison rd north
5020		Yes		Incense cedar	Calocedrus decurrens	7	7	54	5	2 Major Structure or Health Problems	0	yes	Suppressed. Located 6' adjacent to Callison road
5021		Yes		Incense cedar	Calocedrus decurrens	12	12	54	10	3 Fair - Minor Problems	12	yes	Upright structure. Located 6' adjacent to Callison road north
5022		Yes		Incense cedar	Calocedrus decurrens	12	12	54	8	2 Major Structure or Health Problems	0	yes	Suppressed east one sided leaning canopy west.

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5023		Yes		Interior Live Oak	Quercus wislizenii	23	23	54	30	2 Major Structure or Health Problems	0	yes	Codominant at 6' trampolines east. Decay wound seem southwest at 4'. Located 5' Adjacent Callison Road
5024		No		Blue Gum	Eucalpytus globulus	6	6	54	5	1 Extreme Structure or Health Problems	6	No	Suppressed leaning
5025		No		Blue Gum	Eucalpytus globulus	6	6	54	15	1 Extreme Structure or Health Problems	6	No	Suppressed and leaning
5026		No		Blue Gum	Eucalpytus globulus	7	7	54	15	2 Major Structure or Health Problems	7	No	Suppressed and leaning
5027		No		Blue Gum	Eucalpytus globulus	8	8	54	15	2 Major Structure or Health Problems	8	yes	Suppressed and leaning
5028		No		Blue Gum	Eucalpytus globulus	8	8	54	15	2 Major Structure or Health Problems	8	yes	Suppressed and leaning
5029		No		Blue Gum	Eucalpytus globulus	13	13	54	15	2 Major Structure or Health Problems	13	yes	Bows in trunk
5030		Yes		Interior Live Oak	Quercus wislizenii	18	18	36	15	2 Major Structure or Health Problems	0	yes	Severe trunk lean south east. Codominant at 36".
5031		Yes		Interior Live Oak	Quercus wislizenii	8	8	54	15	2 Major Structure or Health Problems	0	yes	trunk lean south east. Codominant at 10ft
5032		Yes		Interior Live Oak	Quercus wislizenii	16	16	24	25	2 Major Structure or Health Problems	0	yes	8" lateral north at 36". Codominant at 6'. Mechanical wound self a

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
													24". Suppressed leaning canopy East
5033		Yes		Interior Live Oak	Quercus wislizenii	10	10	54	10	2 Major Structure or Health Problems	0	yes	Pruning ones with the K southside toward road. Suppress north one sided canopy
5034		Yes		Interior Live Oak	Quercus wislizenii	12	12	54	20	2 Major Structure or Health Problems	0	yes	Large pruning wound S. Side Rd. side. Suppressed one-sided severe leaning canopy north west
5035	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,11,9	33	54	25	2 Major Structure or Health Problems	0	yes	Codominant at base three stems. Located 4' adjacent to Callison road north
5036		Yes		Ponderosa Pine	Pinus ponderosa	18	18	54	15	3 Fair - Minor Problems	18	yes	Located 6' adjacent to Callison Rd., North
5037	Yes	Yes		Interior Live Oak	Quercus wislizenii	17, 14, 9	40	54	30	2 Major Structure or Health Problems	0	yes	Growing into canopies east and west. Codominant at base three stems. Located 6' adjacent from Callison road north
5038		Yes		Ponderosa Pine	Pinus ponderosa	13	13	54	10	2 Major Structure or Health Problems	0	yes	Suppressed east and west. Located 6' adjacent to Callison Rd., North

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5039	Yes	Yes		Interior Live Oak	Quercus wislizenii	27	27	54	30	3 Fair - Minor Problems	27	No	Low 16" lateral east at 12". Average amount of dead branches in lower canopy. Located 3' adjacent to Callison Rd., North
5040		Yes		Interior Live Oak	Quercus wislizenii	13	13	54	20	2 Major Structure or Health Problems	0	yes	Suppressed east and west Codominant at 20'
5041		Yes		Interior Live Oak	Quercus wislizenii	12,11	23	54	30	2 Major Structure or Health Problems	0	yes	Codominant at base to stems some inclusion. Suppression east and west one sided leaning canopy north
5042		Yes		Incense cedar	Calocedrus decurrens	6	6	54	4	2 Major Structure or Health Problems	0	yes	Suppressed
5043		Yes		Interior Live Oak	Quercus wislizenii	14	14	54	25	2 Major Structure or Health Problems	0	yes	Call dumb at 15'. Fuck wound seem east at 10'. Bigger and density fair to poor
5044		Yes		Interior Live Oak	Quercus wislizenii	18	18	54	25	2 Major Structure or Health Problems	0	No	Trunk leans south east. Codominant at 10'. Pour cut at 8' west side tore off and cracked at trunk. 12" prune
5045		Yes		Interior Live Oak	Quercus wislizenii	15	15	54	30	2 Major Structure or Health Problems	0	No	Codominant at 15'. Growing into canopies north and south
5046		Yes		Incense cedar	Calocedrus decurrens	8	8	54	6	2 Major Structure or Health Problems	0	No	Suppressed north and south

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5047		Yes		Incense cedar	Calocedrus decurrens	6	6	54	6	2 Major Structure or Health Problems	0	No	Suppressed north and south
5048		Yes		Incense cedar	Calocedrus decurrens	9	9	54	6	2 Major Structure or Health Problems	0	No	Suppressed north and south
5049		Yes		Incense cedar	Calocedrus decurrens	10	10	54	8	2 Major Structure or Health Problems	0	No	Suppressed north and south
5050		Yes		Blue Oak	Quercus douglasii	6	6	54	10	2 Major Structure or Health Problems	0	No	Codominant at 12'. Lower canopy suppressed north and south
5051		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	4	1 Extreme Structure or Health Problems	0	No	Tree top at 10'
5052		Yes		Interior Live Oak	Quercus wislizenii	6	6	24	4	1 Extreme Structure or Health Problems	0	**Impacted**	Codominant at 36". Northern lateral topped at 6'. Growing on the side of cut back.
5053		Yes		Interior Live Oak	Quercus wislizenii	0	0	54	30	2 Major Structure or Health Problems	0	yes	Codominant at 24" to stems some inclusion. Trunks lean south east. Above average dead branches bigger and density poor
5054		Yes		Interior Live Oak	Quercus wislizenii	11	11	54	15	2 Major Structure or Health Problems	0	yes	Codominant at 7'. 4" lateral east at 36". Mechanical wound west at 36" bigger and density fair

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5055		Yes		Blue Oak	Quercus douglasii	9	9	54	12	2 Major Structure or Health Problems	0	no	Trunk in accessible. Located in blackberry patch. Tag on barbed wire fence west of tree. Codominant at 10' growing into canopy south east.
5056		Yes		Blue Oak	Quercus douglasii	10	10	54	10	2 Major Structure or Health Problems	0	yes	Upright structure good scaffolding
5057		Yes		Blue Oak	Quercus douglasii	6	6	54	5	3 Fair - Minor Problems	6	yes	Upright structure nice scaffolding. Low 4" lateral at base Southwest
5058		Yes		Interior Live Oak	Quercus wislizenii	7	7	54	10	2 Major Structure or Health Problems	0	yes	DK wound Westside at base. Bark exfoliation west side up trunk to 4' sunscald. Codominant at 7'.
5059		Yes		Blue Oak	Quercus douglasii	9	9	54	8	2 Major Structure or Health Problems	0	yes	Codominant at 18'. Growing into canopy south
5060		No		Pear	Pyrus sp.	7	7	54	10	2 Major Structure or Health Problems	7	yes	Codominant at 4'. Growing into Canobie north and south.
5061		No		Pear	Pyrus sp.	7	7	54	10	2 Major Structure or Health Problems	7	yes	Codominant at 4'. Growing into Canobie south.
5062		No		Pear	Pyrus sp.	9	9	12	8	2 Major Structure or Health Problems	9	**yes**	Codominant at 24" multi-stem.

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5063		No		Pear	Pyrus sp.	6	6	6	5	2 Major Structure or Health Problems	6	**yes**	Codominant at 6" growing into canopy north and south.
5064	Yes	Yes		Valley Oak	Quercus lobata	27	27	54	30	2 Major Structure or Health Problems	0	yes	Codominant at 15'. Pruned Southside for powerline. Above average deadwood in canopy
5065		Yes		Plum		9	9	12	20	0 Dead	0	yes	Severe lean East.Growing at base of large oak raised roots growing around base of large oak.
5066		No		Plum	Prunus sp.	6	6	54	15	1 Extreme Structure or Health Problems	6	yes	Suppressed canopy lean south under power lines 50% foliage
5067		No		Plum		15	15	54	5	0 Dead	15	yes	Dead stump with sprouts
5068		No		Plum	Prunus sp.	0	0	54	15	1 Extreme Structure or Health Problems	0	**yes**	Codominant base three stems multiple dead stems, multiple decay cavities at base suppressed leaning south vigor and density very poor
5069		No		English walnut	Juglans regia	11	11	54	10	1 Extreme Structure or Health Problems	11	**yes**	Suppressed severe lean south. Under power lines. Foliage is browning. Vigor poor
5070		No		Plum	Prunus sp.	15	15	12	15	2 Major Structure or Health Problems	15	**yes**	Codominant at 24" to stems. Blackberry at BJs. Above average dead branches lower canopy.

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5071		No		Plum	Prunus sp.	11	11	12	20	2 Major Structure or Health Problems	11	yes	Suppressed severe lean Northwest Growing into canopies west and east multiple dead stems vigor poor
5072	Yes	Yes		Interior Live Oak	Quercus wislizenii	16,13	29	54	35	1 Extreme Structure or Health Problems	0	yes	Codominant at 12" two stems growing 90° north and south canopy on ground suppressed vigor poor
5073		No		Plum	Prunus sp.	0	0	54	20	1 Extreme Structure or Health Problems	0	yes	Codominant at base decay cavity in northern stem north side of stem. Half the canopy is dead.
5074		Yes		Valley Oak	Quercus lobata	18	18	54	20	1 Extreme Structure or Health Problems	0	yes	Trilene south. Under power lines. Tops for powerlines. Severe broken decaying dead branches. Exposed cambium in trunk north and south sides with fruiting bodies vigor very poor
5075		No		Plum	Prunus sp.	6	6	54	15	1 Extreme Structure or Health Problems	6	yes	Suppressed severe lean south west. 50% of foliage dead
5076		No		English walnut	Juglans regia	0	0	54	20	1 Extreme Structure or Health Problems	0	n	Codominant at base week attachments. Four stems suppressed. Under power lines

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5077		No		English walnut	Juglans regia	12	12	54	20	2 Major Structure or Health Problems	12	No	Moderate lean north west lower canopy suppressed
5078		No		English walnut	Juglans regia	10	10	54	15	2 Major Structure or Health Problems	10	No	Severe lean East suppressed
5079		No		Plum	Prunus sp.	0	0	24		1 Extreme Structure or Health Problems	0	yes	Tree failed at roots. Tree growing along ground blackberries have overtaken canopy
5080		No		English walnut	Juglans regia	0	0	54	15	1 Extreme Structure or Health Problems	0	No	Codominant at days. Bows in stems severe lean north and south. Under power lines.
5081		Yes		Interior Live Oak	Quercus wislizenii	15	15	12	15	0 Dead	0	No	Codominant at 12" suppressed severe lean north both stems have broken off only remaining foliage are at Cormick sprouts
5082		No		English walnut	Juglans regia	10	10	54	15	1 Extreme Structure or Health Problems	10	No	Suppressed severely north
5083		No	Yes	Plum	Prunus sp.	15	15	54	20	1 Extreme Structure or Health Problems	15	No	Suppressed severe lean east. Multiple dead stems in canopy vigor poor. Severe decay wound north east at 24".Canopy in coaches site 10' north

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5083		Yes	Yes	Incense cedar	Calocedrus decurrens	10	10	54	8	1 Extreme Structure or Health Problems	0	No	Tree tops for powerlines. Offsite encroaches 6' north
5084		No	Yes	Plum	Prunus sp.	8	8	54	15	1 Extreme Structure or Health Problems	8	No	Offsite canopy encroaching 5' onto site. Dead tree West leaning into canopy. Barb wire wrapped around trunk up to 36". Vigor very poor
5085		Yes	Yes	Incense cedar	Calocedrus decurrens	6	6	54	5	1 Extreme Structure or Health Problems	0	No	Top for powerlines suppressed. Offsite canopy encroaches site 3'.
5086		No	Yes	Plum	Prunus sp.	8	8	54	10	1 Extreme Structure or Health Problems	8	No	Dead tree west leaning in canopy. Barb wire wrapped around trunk up to 36". Suppressed growing into canopies east vigor pour. Canopy encroaching onto site 5'. Under power lines
5087		Yes		Interior Live Oak	Quercus wislizenii	13	13	54	30	1 Extreme Structure or Health Problems	0	No	Codominant at 5'. Suppressed trunk and canopy severe lean with tree growing through canopy.
5088		No		Plum	Prunus sp.	0	0	54	15	1 Extreme Structure or Health Problems	0	No	Suppressed severely north. Codominant at base three stems. Dead and cracking stems in canopy growing into

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													adjacent trees south and east. Topped For powerlines
5089		No		Plum	Prunus sp.	0	0	54	15	1 Extreme Structure or Health Problems	0	No	Codominant base five stems. Suppressed multiple cracked it in dead stems. Under power lines
5090		Yes		Interior Live Oak	Quercus wislizenii	16	16	54	25	1 Extreme Structure or Health Problems	0	No	Suppressed severe lean trunk and canopy north multiple bows in trunk.
5091		No		Plum	Prunus sp.	0	0	54	15	1 Extreme Structure or Health Problems	0	No	Top for powerlines codominant base multiple stems. Multiple cracked and dead stems in canopy
5092		No		Plum	Prunus sp.	0	0	54	15	1 Extreme Structure or Health Problems	0	No	Codominant base multiple stems. Topped for powerlines suppressed multiple dead stems.
5093	Yes	Yes		Interior Live Oak	Quercus wislizenii	20, 18,11	49	54	25	2 Major Structure or Health Problems	0	yes	Codominant at 12" some inclusion. Road grading within drip line 15' from trunk West
5094	Yes	Yes		Interior Live Oak	Quercus wislizenii	23,18	41	54	20	2 Major Structure or Health Problems	0	yes	Codominant stands at base leaning north and south. DK in trunk between two stems.

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5095	No	No		Blue Gum	Eucalpytus globulus	18,17	35	54	15	1 Extreme Structure or Health Problems	12	No	Codominant at base to stems DK cavity at base East. TK and bark between stems. Wound cavities on both leaders. Suppressed tops broken off of both stems. Canopy is wound sprouts
5096	No	No		Blue Gum	Eucalpytus globulus	29	29	54	30	3 Fair - Minor Problems	10	No	Located on South Bank of county irrigation ditch. Multiple break off wounds with DKN wounds
5097		Yes		Interior Live Oak	Quercus wislizenii	13	13	48	12	2 Major Structure or Health Problems	0	No	Codominant at 5'. Leaning trunk with bow at 5'. Suppressed west. Canopy leaning south. Located on south bank of county irrigation ditch
5098		Yes		Interior Live Oak	Quercus wislizenii	9	9	54	12	2 Major Structure or Health Problems	0	No	Upright structure. Lower canopy suppressed above average dead branches. Codominant at 15'. Located on south bank of county irrigation ditch
5098		Yes		Interior Live Oak	Quercus wislizenii	9	9	54	12	2 Major Structure or Health Problems	0	yes	Upright structure lower crown suppressed above average dead branches. Codominant at 18'. Located on South Bank of county irrigation ditch

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5099		Yes		Interior Live Oak	Quercus wislizenii	12	12	54	15	1 Extreme Structure or Health Problems	0	yes	Trunk and canopy lean south from suppression. Bow in trunk at 36" decay and bark and old breakout wound with decay northside at 36".
5100		Yes		Interior Live Oak	Quercus wislizenii	10	10	54	15	2 Major Structure or Health Problems	0	yes	Lower canopy suppressed east and west. Upright structure. Codominant at 6' above average dead branches lower canopy vigor fair to poor
5101		Yes		Interior Live Oak	Quercus wislizenii	21	21	54	20	2 Major Structure or Health Problems	0	yes	Codominant at 18'. Canopy lean south. Located on south bank of county irrigation ditch. Tree is 8' north of utility and pole with the transformer
5102		Yes		Blue Oak	Quercus douglasii	8	8	54	10	2 Major Structure or Health Problems	0	yes	Upright structure. Codominant at 8'. Suppressed Easton west
5103		Yes		Blue Oak	Quercus douglasii	12	12	54	12	2 Major Structure or Health Problems	0	yes	Upright structure code dumb at 10'. Mechanical wounds north side of trunk at days and 4'
5104		Yes		Blue Oak	Quercus douglasii	13	13	54	15	2 Major Structure or Health Problems	0	yes	Canopy lean south. Codominant at 10'. Mechanical trunk wound north at 36". Tree is located 4' south of

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													cement irrigation inlet box with digging for pipes down in CRZ
5105	No	No		Blue Gum	Eucalpytus globulus	44	44	54	40	1 Extreme Structure or Health Problems	0	yes	Codominant at 25'. Breakout wounds with decay in lower third of trunk north and south. Top stem died severe dead branches in canopy 50% foliage loss
5106		Yes		Interior Live Oak	Quercus wislizenii	8	8	54	12	1 Extreme Structure or Health Problems	0	yes	Suppressed trunk and Canopy lean, South Codominant at 8' vigor
5107	Yes	Yes		Interior Live Oak	Quercus wislizenii	16,10	26	54	15	1 Extreme Structure or Health Problems	0	yes	Trunk and canopy lean south Codominant at 12" severe inclusion and some separation
5108		Yes		Interior Live Oak	Quercus wislizenii	17	17	54	18	2 Major Structure or Health Problems	0	**yes**	Low lateral east at 12". Codominant at 4' some inclusion. Located on North Bank of county irrigation ditch roots on southside prune for ditch
5109		Yes		Grey pine	Pinus sabiniana	12	12	54	15	1 Extreme Structure or Health Problems	0	yes	Suppression growth west significant lean.root system compromised on the south side by county irrigation ditch

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5110		Yes		Blue Oak	Quercus douglasii	10	10	54	20	1 Extreme Structure or Health Problems	0	yes	Suppressed cannot be severely lean south over county irrigation ditch. Root system compromised by ditch on southside.
5111		Yes		Interior Live Oak	Quercus wislizenii	7	7	54	12	1 Extreme Structure or Health Problems	0	yes	Suppressed severely leaning canopy south East Over county irrigation ditch. root system compromised southside by ditch
5112		Yes		Grey pine	Pinus sabiniana	18	18	54	18	2 Major Structure or Health Problems	0	yes	Significant lean Southwest over county irrigation ditch. Root system on southside compromised by ditch.
5113		Yes		Interior Live Oak	Quercus wislizenii	7,7,6,5	25	54	15	1 Extreme Structure or Health Problems	0	yes	Codominant at base week attachments. Four lives stems. One sided leaning canopy north west. Root system Southside compromised by irrigation ditch
5114		Yes		Interior Live Oak	Quercus wislizenii	6,6,5,5,3	25	54	15	1 Extreme Structure or Health Problems	0	No	Codominant base week Attachments. Five stems suppressed canopy leaning south west. Road grading on the northside has raised grade on root zone by 18" on the north side.

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5116		Yes		Interior Live Oak	Quercus wislizenii	14	14	24	10	1 Extreme Structure or Health Problems	0	No	Suppressed above. Lost its original top. Trunk Bose severely southwest. Canopy consists of small wound sprouts 5 to 3" in diameter.
5117		Yes		Blue Oak	Quercus douglasii	16	16	54	20	2 Major Structure or Health Problems	0	No	Codominant at 15'. Road grading on southside has lowered grade 12" right to the trunk Southside
5118		Yes		Blue Oak	Quercus douglasii	12,10	22	54	15	2 Major Structure or Health Problems	0	yes	Codominant base to stems. Eastern stem top failed long ago small canopy is only wound sprouts. Main stem code him at 7'.
5119	Yes	Yes		Blue Oak	Quercus douglasii	34	34	54	12	0 Dead	0	yes	Tree lost its top long ago. Severe decay cavity up to 36" trunk is 90% Hollow. Canopy consist only of wound sprouts
5120		Yes		Interior Live Oak	Quercus wislizenii	7,5,5,3,3,3	26	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem that base week attachments suppressed south
5121		Yes		Interior Live Oak	Quercus wislizenii	6,5,3,3	17	54	15	1 Extreme Structure or Health Problems	0	yes	Multi-stem that base week attachments. Significant inclusion growing into canopies north and south

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5122		Yes		Interior Live Oak	Quercus wislizenii	11,5,5	21	54	18	1 Extreme Structure or Health Problems	0	yes	Multi stems at base significant lean. Decay cavities at base. 4" and 6" pruning cuts at base Severe Canopy lean, Southeast
5123	Yes	Yes		Blue Oak	Quercus douglasii	25	25	54	25	1 Extreme Structure or Health Problems	0	yes	Codominant at 6'. Serious decline in canopy severe dead branches. 40% of foliage remaining. Road grading to the north has added up to 4' of wash to root zone from trunk sloping up to a Distance of 8'.
5124		Yes		Blue Oak	Quercus douglasii	16.0	16.0	24	18	2 Major Structure or Health Problems	0	yes	Codominant at 36". Canopy lean south west
5125		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	12	2 Major Structure or Health Problems	0	yes	Upright structure Codominant limb at 15'. Rd. graded through drip line at 5' from trunk grade dropped 24".
5126	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,7,6, 3	41	54	20	2 Major Structure or Health Problems	0	yes	Multi stems at base week attachments decay between stems at base. Significant leans on stems
5127		Yes		Interior Live Oak	Quercus wislizenii	8,3	11	54	15	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base week attachments. Suppressed above

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													severe Canobie lean northwest.
5128		Yes		Blue Oak	Quercus douglasii	12,6	18	54	15	2 Major Structure or Health Problems	0	yes	Low lateral west at 12". Codominant at 4'.
5129		Yes		Blue Oak	Quercus douglasii	9,5	14	54	12	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base to stems suppressed above severe leaning canopy Northwest above average dead branches lower canopy. Figure for
5130		Yes		Blue Oak	Quercus douglasii	10,5	15	54	15	2 Major Structure or Health Problems	0	yes	Multi stem at base. Main stem Codominant at 5'. Suppression canopy leaning south east.
5131		Yes		Interior Live Oak	Quercus wislizenii	12	12	54	15	1 Extreme Structure or Health Problems	0	yes	Suppressed east. Severe leaning trunk and canopy south growing into canopy East
5132		Yes		Interior Live Oak	Quercus wislizenii	5,4	9	54	4	2 Major Structure or Health Problems	0	yes	Suppress north Codominant at 12"
5133		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	10	1 Extreme Structure or Health Problems	0		Suppressed severely in South
5134		Yes		Interior Live Oak	Quercus wislizenii	8,6	14	54	15	1 Extreme Structure or Health Problems	0		Multi standard base. Two remaining stems. 7" and 5" pruning cuts made at base. Canopy leaning South

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5135		Yes		Blue Oak	Quercus douglasii	12	12	54	20	3 Fair - Minor Problems	12		Upright structure good scaffolding.
5136	Yes	Yes		Interior Live Oak	Quercus wislizenii	17,13	30	54	20	1 Extreme Structure or Health Problems	0		Multi stem at base to stems significant inclusion severe leaning trunks and canopy west. Suppression larger stem DK cavity at 12" east
5137		Yes		Interior Live Oak	Quercus wislizenii	7	7	54	8	2 Major Structure or Health Problems	0		Suppressed Codominant at 4'. Leaning trunk and canopy south east
5138		Yes		Interior Live Oak	Quercus wislizenii	14, 9	23	36	20	2 Major Structure or Health Problems	0		Codominant at 24". Some inclusion trunk leaning west. The cavity at base East
5139		Yes		Blue Oak	Quercus douglasii	21.0	21.0	54	25	2 Major Structure or Health Problems	0		Codominant at 12' above average dead branches lower canopy
5140		Yes		Interior Live Oak	Quercus wislizenii	19.0	19.0	54	20	1 Extreme Structure or Health Problems	0		One sided suppressed canopy leaning south. Severe decay cavity north west from base to 36"
5141		Yes		Interior Live Oak	Quercus wislizenii	16.0	16.0	54	25	1 Extreme Structure or Health Problems	0		Trunk and canopy lean north east. Significant decline the top north east. 85% foliage remaining
5142		Yes		Interior Live Oak	Quercus wislizenii	16.0	16.0	54	25	2 Major Structure or Health Problems	0		Trunk and canopy lean north west. Codominant at 8'.

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5143		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	12	1 Extreme Structure or Health Problems	0		Codominant 16'. Suppressed severe canopy lean
5144		Yes		Blue Oak	Quercus douglasii	18.0	18.0	36	25	2 Major Structure or Health Problems	0		Codominant at 5' two stems. Growing into canopy East
5145		Yes		Blue Oak	Quercus douglasii	18.0	18.0	54	20	2 Major Structure or Health Problems	0		Codominant at 8'. Above average dead branches lower canopy
5146		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	5	2 Major Structure or Health Problems	0		Operate structure Codominant at 8'
5147		Yes		Blue Oak	Quercus douglasii	19.0	19.0	54	21	3 Fair - Minor Problems	19		Upright structure Codominant at 18'.
5148		Yes		Blue Oak	Quercus douglasii	5,3,2,2	12	36	6	1 Extreme Structure or Health Problems	0		Codominant at base for stems. Upright structure
5149		Yes		Blue Oak	Quercus douglasii	14	14	54	20	2 Major Structure or Health Problems	0		Codominant at 15'. Canopy leans south
5150		Yes		Blue Oak	Quercus douglasii	20	20	54	25	1 Extreme Structure or Health Problems	0		Flat trunk Codominant at 10'. Low vertical lateral off trunk at 5'.
5151		Yes		Blue Oak	Quercus douglasii	13	13	54	18	3 Fair - Minor Problems	13	**no**	Upright structure good scaffolding recent tree work on lower laterals biggest cut 4". Decent cut
5152		Yes		Blue Oak	Quercus douglasii	16	16	54	18	3 Fair - Minor Problems	16	**No**	Upright structure Codominant at 16'. Recent crown raising

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
													trimming on lower trunk biggest cut 3"
5153		Yes		Blue Oak	Quercus douglasii	16	16	54	15	2 Major Structure or Health Problems	0	**No**	Upright structure Codominant at 7' with some inclusion. Crown raising recent pruning lower canopy biggest cut 3"
5154	Yes	Yes		Blue Oak	Quercus douglasii	27	27	54	30	2 Major Structure or Health Problems	0	**No**	Canopy lean moderately south. Above average dead larger branches bigger fair to poor
5155		Yes		Interior Live Oak	Quercus wislizenii	7	7	54	4	2 Major Structure or Health Problems	0	yes	Slightly north. Codominant at 12'.
5156		Yes		Interior Live Oak	Quercus wislizenii	15	15	54	20	2 Major Structure or Health Problems	0		Suppressed north one side severe leaning canopy south east.
5157		Yes		Interior Live Oak	Quercus wislizenii	18	18	54	20	3 Fair - Minor Problems	18		Codominant earth 16'. Upright structure
5158		Yes		Interior Live Oak	Quercus wislizenii	10	10	54	15	1 Extreme Structure or Health Problems	0		Suppressed boat in trunk at 4'. Recent cuts at 12" south west both 7" cut. Severe one-sided leaning canopy South West
5159		Yes		Blue Oak	Quercus douglasii	14	14	54	25	2 Major Structure or Health Problems	0		Codominant at 18'. Suppression growth one-sided leaning canopy south over county irrigation ditch

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5160		Yes		Blue Oak	Quercus douglasii	20	20	54	21	2 Major Structure or Health Problems	0	**yes**	Codominant at 10'. Trunk and canopy lean south. Canopy over county irrigation ditch. Southside root system compromised by ditch.
5161		Yes		Interior Live Oak	Quercus wislizenii	15	15	54	25	1 Extreme Structure or Health Problems	0	**yes**	Codominant at 20'. Dead top in main stem. 70% foliage remaining. root system compromised Eastside by irrigation ditch
5162	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,6,4, 4	39	54	25	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments. Largest Stams lean south west. On the backside of all of the stems is decayed included bark from the other half of the tree that is no longer existing. DK at base
5163		Yes		Interior Live Oak	Quercus wislizenii	17.00	17.00	54	15	2 Major Structure or Health Problems	0	yes	Trunk bows severely to the south east at 24" canopy corrects at 5'. Codominant at 8'.
5164		Yes		Interior Live Oak	Quercus wislizenii	0.0	0.0	54	20	2 Major Structure or Health Problems	0	yes	Codominant at 24"

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5165	Yes	Yes		Interior Live Oak	Quercus wislizenii	34	34	54	30	1 Extreme Structure or Health Problems	0	**No**	For large recent pruning cuts to the trunk smallest 12" largest 15" south east side. Severe mechanical branch tearing wounds mid and lower canopy west side
5166		Yes		Blue Oak	Quercus douglasii	21.0	21.0	24	15	1 Extreme Structure or Health Problems	0		Flat trunk. Codominant at 36".
5167		Yes		Interior Live Oak	Quercus wislizenii	20.0	20.0	54	15	1 Extreme Structure or Health Problems	0	**No**	Decay cavity at base exposed roots South east. Severe trunk lean north west. Codominant at 6'
5168		Yes		Valley Oak	Quercus lobata	19.0	19.0	54	30	2 Major Structure or Health Problems	0	yes	Suppressed east one sided severe leaning canopy west Codominant at 18'.
5169		Yes		Valley Oak	Quercus lobata	16.0	16.0	54	20	3 Fair - Minor Problems	16	yes	Upright structure Codominant at 20'.
5170		Yes		Valley Oak	Quercus lobata	16.0	16.0	54	20	2 Major Structure or Health Problems	0	yes	Suppressed north. Severe leaning canopy south above average deadwood. Codominant at 18'.
5171		Yes		Valley Oak	Quercus lobata	13.0	13.0	54	12	3 Fair - Minor Problems	13	yes	Upright structure Codominant at 12'.
5172		Yes		Interior Live Oak	Quercus wislizenii	16.0	16.0	54	20	2 Major Structure or Health Problems	0		Codominant at 4'. Canopy lean south.

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5173		Yes		Interior Live Oak	Quercus wislizenii	15.0	15.0	54	20	2 Major Structure or Health Problems	0		Trunk lean significantly north east. Good scaffolding
5174		Yes		Blue Oak	Quercus douglasii	19.0	19.0	54	21	3 Fair - Minor Problems	19		Upright structure Codominant at 10'.
5175		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	15	2 Major Structure or Health Problems	0		Trunk has multiple bows. Codominant at 20'
5176		Yes		Interior Live Oak	Quercus wislizenii	10,9	19	54	15	2 Major Structure or Health Problems	0		Multi-stem at base to stems week attachments some inclusion. Suppressed north
5177		Yes		Blue Oak	Quercus douglasii	6	6	54	8	1 Extreme Structure or Health Problems	0		Suppressed Codominant at 20' above average dead branches lower
5178		Yes		Interior Live Oak	Quercus wislizenii	6,6,3,2	17	54	18	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments suppressed severe trunk and canopy lean sell
5179		Yes		Interior Live Oak	Quercus wislizenii	6,5,3,2,2	18	54	12	1 Extreme Structure or Health Problems	0		Multi stems at base week attachments suppressed canopy leans south
5180		Yes		Interior Live Oak	Quercus wislizenii	7,7,4	18	54	15	1 Extreme Structure or Health Problems	0		Multi-stem at base we can attachments suppressed south severe leaning canopy
5181		Yes		Interior Live Oak	Quercus wislizenii	10	10	54	18	1 Extreme Structure or Health Problems	0		Codominant at 4'. Suppression growth one-sided severe leaning canopy Northwest

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5182	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 10,5	27	54	18	2 Major Structure or Health Problems	0		Codominant at 12" three stems some inclusion. Suppressed Flower canopy
5183		Yes		Interior Live Oak	Quercus wislizenii	7	7	54	15	1 Extreme Structure or Health Problems	0		Trunk and canopy lean east.
5184	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,7	33	54	15	2 Major Structure or Health Problems	0		Coco dumb at base suppression worst severe canopy lean
5185		Yes		Blue Oak	Quercus douglasii	22.0	22.0	54	18	3 Fair - Minor Problems	22		Upright structure. Codominant at 6'
5186		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	10	1 Extreme Structure or Health Problems	0		Upright structure Codominant at 7'. Five wires of barbed wire included in lower trunk 50% inclusion into the truck
5187		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	12	2 Major Structure or Health Problems	0		Upright structure Codominant at 20'. Lower canopy suppressed
5188		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	6	2 Major Structure or Health Problems	0		Vertical structure. Poor taper suppressed east west north
5189		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	24	8	1 Extreme Structure or Health Problems	0		Suppressed canopy and trunk leaning north east. Bark exfoliation on trunk south west. Sunscald
5190		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0		Suppressed trunk and canopy leaning West

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5190		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0		Suppressed canopy leaning west.
5191		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	6	1 Extreme Structure or Health Problems	0		
5192		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	8	2 Major Structure or Health Problems	0		Operate structure Codominant at 15'. Lower Canterbury suppressed above average dead branches
5193		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	2 Major Structure or Health Problems	0		Upright structure Codominant at 8'. Lower canopy suppressed above average dead
5194		Yes		Blue Oak	Quercus douglasii	6.0	6.0	36	8	1 Extreme Structure or Health Problems	0		Codominant at 4'. Suppressed south one sided leaning canopy north. Above average dead
5195		Yes		Blue Oak	Quercus douglasii	20.0	20.0	54	21	2 Major Structure or Health Problems	0		Flat trunk Codominant at 36"
5196	Yes	Yes		Blue Oak	Quercus douglasii	12,11,10	33	54	25	2 Major Structure or Health Problems	0		Multi-stem at base east stem Codominant at 12" lower canopy suppressed mistletoe.
5197		Yes		Interior Live Oak	Quercus wislizenii	9,5	14	54	15	1 Extreme Structure or Health Problems	0	**No**	Codom at base. Suppressed larger stem leaving trunk and canopy east

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5198	Yes	Yes		Interior Live Oak	Quercus wislizenii	12,10,4	26	54	18	2 Major Structure or Health Problems	0	**No**	Codominant at base. Low lateral on the east side of the center stem has grafted into Eastern stem at 24". Suppression growth can be leaning south west
5199		Yes		Interior Live Oak	Quercus wislizenii	6,5,5	16	54	8	2 Major Structure or Health Problems	0	**No**	Multi-stem at base three stems week attachments. Suppression growth trunks and canopy leaning Southwest growing into canopy West
5200		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	12	1 Extreme Structure or Health Problems	0	**No**	Suppression growth trunk those west and canopy severe lean West
5201		Yes		Interior Live Oak	Quercus wislizenii	15,8	23	54	25	2 Major Structure or Health Problems	0	**No**	Codominant at 12" suppression growth stems in canopy severe lean West
5202		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	6	1 Extreme Structure or Health Problems	0		Codominant at 6'. Above average dead in crown 40% full and remaining. I observe grading done in critical root zone and evidence of a burn pile very close to tree Eastside

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5203		Yes		Blue Oak	Quercus douglasii	8.0	8.0	54	12	1 Extreme Structure or Health Problems	0		Good scaffolding. Vertical lateral Eastside at 4'. Suppressed East canopy lean West
5204		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	15	1 Extreme Structure or Health Problems	0		Mechanical wounds exposed cambium Westside at base. Trunk and canopy leaning north east. Rd. grading done in root zone 2' north of trunk.
5205		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	15	3 Fair - Minor Problems	15		Upright structure code Im at 16'.
5206		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	12	2 Major Structure or Health Problems	0		Suppression growth Codominant at 6'. One-sided canopy north
5207		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	15	3 Fair - Minor Problems	13	**No**	Upright structure Codominant at 12'.
5208		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	6	2 Major Structure or Health Problems	0	**No**	Suppressed one-sided can it be growing East Codominant at 10'. Above average dead branches in
5209		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	20	3 Fair - Minor Problems	16	**No**	Upright structure. Codominant at 22'.
5210	Yes	Yes		Blue Oak	Quercus douglasii	24	24	12	18	2 Major Structure or Health Problems	0	**No**	Codominant at 24" two stems
5211		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	10	1 Extreme Structure or Health Problems	0	**No**	Codominant at 8'. Suppressed one-sided severe leaning canopy East

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5212		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	20	3 Fair - Minor Problems	15	**No**	Upright structure vigor fair
5213		Yes		Blue Oak	Quercus douglasii	12.0	12.0	12	15	2 Major Structure or Health Problems	0	**No**	Codominant at 4'. Suppression east one sided leaning canopy West
5214		Yes		Blue Oak	Quercus douglasii	21.0	21.0	24	20	2 Major Structure or Health Problems	0	**No**	Codominant at 5'. Small cavity at 12" north west minor decay
5215		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	6	2 Major Structure or Health Problems	0	**No**	Codominant at 12'. Upright structure lower canopy suppressed
5216	Yes	Yes		Blue Oak	Quercus douglasii	13,11	24	54	15	2 Major Structure or Health Problems	0	**No**	Two stems that base growing into canopies north and south
5217		Yes		Blue Oak	Quercus douglasii	10.00	10.00	54	6	2 Major Structure or Health Problems	0	**No**	Upright structure Codominant at 9'. Suppressed East
5218	Yes	Yes		Blue Oak	Quercus douglasii	24	24	54	20	3 Fair - Minor Problems	24		Upright structure Codominant at 15'
5219		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	20	2 Major Structure or Health Problems	0		Codominant at 18'. Suppressed east one sided leaning canopy Southwest
5220		Yes		Blue Oak	Quercus douglasii	17.0	17.0	36	15	2 Major Structure or Health Problems	0		Suppressed east. Codominant at 4' one sided canopy west. Flat trunk
5221		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	15	2 Major Structure or Health Problems	0		Codominant at 10' one-sided canopy south east

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5222		Yes		Blue Oak	Quercus douglasii	11.0	11.0	54	15	3 Fair - Minor Problems	11		Upright structure good scaffolding
5223		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	4	1 Extreme Structure or Health Problems	0	**No**	Suppressed above
5224	Yes	Yes		Blue Oak	Quercus douglasii	14,12	26	54	15	2 Major Structure or Health Problems	0	**No**	Two stems at 12". Growing into canopies east and west
5225		Yes		Blue Oak	Quercus douglasii	11	11	54	10	2 Major Structure or Health Problems	0	**No**	Suppression growth canopy severely leaning south
5226		Yes		Blue Oak	Quercus douglasii	8,8	16	54	15	2 Major Structure or Health Problems	0		Codominant at 12". Two stems some inclusion suppressed East one-sided leaning canopy West
5227		Yes		Blue Oak	Quercus douglasii	14.0	14.0	54	25	1 Extreme Structure or Health Problems	0		Codominant 15'. Trunk and canopy significant lean West
5228		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	12	2 Major Structure or Health Problems	0		Upright structure Codominant at 16'. Lower canopy suppressed
5229		Yes		Blue Oak	Quercus douglasii	11.0	11.0	54	15	2 Major Structure or Health Problems	0		Suppressed west. Coda mom at 7' severe leaning Canobie East
5230		Yes		Blue Oak	Quercus douglasii	7,6,5	18	54	10	2 Major Structure or Health Problems	0		Multi stem base three stems. Suppressed north
5231		Yes		Blue Oak	Quercus douglasii	17.0	17.0	54	25	2 Major Structure or Health Problems	0		Codominant at 8'. At 12" trunk those Southeast

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													one-sided canopy Southwest
5232		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	15	2 Major Structure or Health Problems	0		Upright structure good scaffolding lower canopy suppressed east and west above average dead branches in canopy
5233		Yes		Blue Oak	Quercus douglasii	19.0	19.0	54	20	3 Fair - Minor Problems	19		8" 90° lateral southeast at 6'. Codominant 8'. Slight trunk and can be lean West
5234		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	15	2 Major Structure or Health Problems	0		Codominant 18'. Suppression Northeast one-sided leaning canopy West
5235		Yes		Blue Oak	Quercus douglasii	10,9	19	54	15	2 Major Structure or Health Problems	0		Two stands at base above average dead branches lower canopy
5236		Yes		Blue Oak	Quercus douglasii	8	8	54	5	1 Extreme Structure or Health Problems	0		Trunk leans significantly south east Bose vertical at 24". Bark exfoliation north east exposed cambium possibly from cattle.
5237	Yes	Yes		Blue Oak	Quercus douglasii	34	34	24	25	2 Major Structure or Health Problems	0		Codominant at 24" three stems. Some inclusion. Approximately 1 foot cavity on the internal side of the three stems doesnt appear to have a lot of decay.

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5238		Yes		Blue Oak	Quercus douglasii	16	16	36	15	2 Major Structure or Health Problems	0	**No**	Flat trunk. Codominant at 5'. Suppressed Northeast severe leaning one-sided canopy South West
5239		Yes		Blue Oak	Quercus douglasii	15	15	54	20	2 Major Structure or Health Problems	0	**No**	Low vertical lateral at 24" east trunk and canopy lean north east
5240		Yes		Blue Oak	Quercus douglasii	8	8	54	5	2 Major Structure or Health Problems	0	**No**	Its like trunk lean north east. One sided leaning canopy west suppressed
5241		Yes		Interior Live Oak	Quercus wislizenii	11,6	17	54	20	1 Extreme Structure or Health Problems	0	**No**	Codominant at 12" to stems. Trunk and canopy lean north west. Canker at base Eastside. Canopy showing the stress 15" lateral dead. Severe dead branches in canopy
5242		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	30	2 Major Structure or Health Problems	0		Codominant 25'. Truck and Canopy lean, North
5243		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	15	2 Major Structure or Health Problems	0	**No**	Suppressed Northeast. Codominant at 10' above average dead branches canopy
5244		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	15	2 Major Structure or Health Problems	0	**No**	Coda Im at 20'. Slight trunk in canopy lean north west
5245		Yes		Interior Live Oak	Quercus wislizenii	5,5	10	54	10	1 Extreme Structure or Health Problems	0		Multi-stem at base to live stems basal decay northside suppressed

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													significant leans in trunks
5246	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,10,9,3, 2	37	54	15	1 Extreme Structure or Health Problems	0		
5247		Yes		Blue Oak	Quercus douglasii	13.00	13.00	54	15	2 Major Structure or Health Problems	0		Codominant at 18'. Suppressed trunk and canopy lean West
5248		Yes		Blue Oak	Quercus douglasii	15.00	15.00	54	20	2 Major Structure or Health Problems	0		Codominant at 10' trunk leans north
5249		Yes		Blue Oak	Quercus douglasii	12.00	12.00	54	12	2 Major Structure or Health Problems	0		Good scaffolding trunk and canopy lean north west
5250		Yes		Interior Live Oak	Quercus wislizenii	6,6,5,5	22	54	12	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments suppressed significant lean on all stems
5251		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	10	1 Extreme Structure or Health Problems	0	**No**	Suppressed severe leaning trunk and canopy north
5252		Yes		Interior Live Oak	Quercus wislizenii	17.0	17.0	54	25	1 Extreme Structure or Health Problems	0	**No**	Trunk wound cavity Eastside lower trunk and middle third of trunk 50% DK and wound. Tallest 8" stem dad
5253		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	54	20	2 Major Structure or Health Problems	0	**No**	Co Dom app 8'. Growing into canopies east and west

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
5254		Yes		Interior Live Oak	Quercus wislizenii	10,5	15	54	15	1 Extreme Structure or Health Problems	0	**No**	Multi-stem at base week attachments trunk and canopies lean significantly north. Stems on the southside no longer present leaving exposed included bark at the base of existing stems
5255		Yes		Interior Live Oak	Quercus wislizenii	5,4,3,3	15	54	10	1 Extreme Structure or Health Problems	0	**No**	Multi-stem at base week attachments for stems suppression trunks and canopy leaning severely north west
5256		Yes		Interior Live Oak	Quercus wislizenii	8,7	15	54	12	1 Extreme Structure or Health Problems	0		Multi-stem a base weak attachments do you live sound. Significant lean on remaining stems
5257		Yes		Blue Oak	Quercus douglasii	15	15	54	18	2 Major Structure or Health Problems	0		Upright structure. Codominant at 20'. Vines growing to 30' up
5258		Yes		Interior Live Oak	Quercus wislizenii	6,5,5,5,4,4,3,3,3,2,2,2	44	54	12	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments significant lean on outer stems
5259		Yes		Blue Oak	Quercus douglasii	10	10	54	10	2 Major Structure or Health Problems	0		Upright structure. Codom
5260		Yes		Interior Live Oak	Quercus wislizenii	9,8,7,4,3	31	54	10	1 Extreme Structure or Health Problems	0		Multi-stem at base week attachments five stems significant lean in trunks

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5261		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	12	2 Major Structure or Health Problems	0	yes	Codominant at 15' multiple bows in lower 2/3 trunk. Canopy leans West.
5262		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	20	2 Major Structure or Health Problems	0	yes	Codominant at 12'. Trunk and one sided canopy lean Northwest. Road grading on southside lower grade in critical root zone right to the trunk by 10' and a 1 to 1 slope
5263		Yes		Blue Oak	Quercus douglasii	17.0	17.0	54	15	2 Major Structure or Health Problems	0	yes	Flat trunk Codominant at 36" two stems.Road grading has raised grade on northside by 4'
5264		Yes		Interior Live Oak	Quercus wislizenii	8,7,6,4,4,4	33	54	10	1 Extreme Structure or Health Problems	0	No	Multi-stem at base week attachments trunks and canopy lean South West
5265		Yes		Interior Live Oak	Quercus wislizenii	16	16	24	15	2 Major Structure or Health Problems	0	Impacted	Codominant at 8'. Low 7" lateral Eastside at 36" one-sided leaning canopy south road grading has raised grade on northside buy up to 5'
5266		Yes		Interior Live Oak	Quercus wislizenii	5,4,4,4,3	20	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base weak attachments five remaining stems suppressed trunks and

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													crown leaning Southwest
5267		Yes		Interior Live Oak	Quercus wislizenii	6,5,5	16	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base week attachments trunks and canopy lean west suppression
5268		Yes		Interior Live Oak	Quercus wislizenii	5,3,3	11	54	10	1 Extreme Structure or Health Problems	0	No	Multi-stem at base week attachments suppression trunks and canopy lean South West
5269		Yes		Interior Live Oak	Quercus wislizenii	12	12	54	20	2 Major Structure or Health Problems	0	No	Codominant at 7' trunk and Canopy lean, North over new graded Road
5270		Yes		Interior Live Oak	Quercus wislizenii	8,7,5,5,4	29	54	15	1 Extreme Structure or Health Problems	0	No	Multi-stem is at the base week attachments. Suppression trunks and canopy lean
5271	Yes	Yes		Interior Live Oak	Quercus wislizenii	12,11,8,8	39	54	15	1 Extreme Structure or Health Problems	0	No	Multi-stem that base week attachments suppression trunks and canopy lean
5272		Yes		Interior Live Oak	Quercus wislizenii	7,6,5,4,4	26	54	10	1 Extreme Structure or Health Problems	0	No	Multi stems that base week attachments suppression outer three stems trunks and canopy Leigh north
5273		Yes		Interior Live Oak	Quercus wislizenii	8,6,2,2	18	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base week attachments

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5274		Yes		Interior Live Oak	Quercus wislizenii	10,9	19	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base week attachment suppression
5275		Yes		Interior Live Oak	Quercus wislizenii	7,6,5,5,4	27	54	10	1 Extreme Structure or Health Problems	0	yes	Multi-stem at base week attachments basil decay in each root clump
5276		Yes		Blue Oak	Quercus douglasii	10	10	54	10	2 Major Structure or Health Problems	0	No	Suppression Codominant at 20'. Above average dead in low canopy. One sided canopy
5277		Yes		Interior Live Oak	Quercus wislizenii	11	11	54	12	1 Extreme Structure or Health Problems	0	No	Codominant at 8'. Severe basil Vicky at former included bark of non-existing Stan West. Growing into canopy south
5278		Yes		Interior Live Oak	Quercus wislizenii	9,8,7,7,5,4 ,3	43	54	15	1 Extreme Structure or Health Problems	0	No	Multi-stem at base week attachments
5279		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	10	1 Extreme Structure or Health Problems	0	Impacted	Suppression severe leaning canopy East
5280		Yes		Blue Oak	Quercus douglasii	11.0	11.0	54	12	2 Major Structure or Health Problems	0	yes	Codominant at 7'.
5281		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	20	1 Extreme Structure or Health Problems	0	yes	Suppressed. Codominant at 7' severe one-sided leaning canopy
5282		Yes		California Buckeye	Aesculus californica	8,7	15	54	15	2 Major Structure or Health Problems	0	yes	Multi-stem at base suppressed outside stems severe lean East

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5283		Yes		Blue Oak	Quercus douglasii	18.0	18.0	54	20	2 Major Structure or Health Problems	0	yes	Upright structure good scaffolding road grading Raised soil grade on northside 3'.
5284		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	2 Major Structure or Health Problems	0	yes	Suppressed above one-sided leaning canopy Northwest
5284		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	2 Major Structure or Health Problems	0	yes	Suppressed above one sided leaning canopy north west
5285		Yes	No	Blue Oak	Quercus douglasii	7	7	54	8	2 Major Structure or Health Problems	0	No	Tag on Barbwire fence west tree suppress north Codominant at 8'.
5286		Yes		Interior Live Oak	Quercus wislizenii	6,3,3	12	54	10	2 Major Structure or Health Problems	0	No	Multi-stem at base week attachments three stems suppressed above
5287		Yes		Blue Oak	Quercus douglasii	6,5	11	54	8	2 Major Structure or Health Problems	0	No	Tag on Barbwire fence. Codominant at base to stems suppressed north
5288		Yes		Interior Live Oak	Quercus wislizenii	4,3,2,2	11	54	6	1 Extreme Structure or Health Problems	0	No	Multi-stem at base week attachments for stems road grading to the east has buried trunks 36".
5289		Yes		Blue Oak	Quercus douglasii	6,3	9	54	8	2 Major Structure or Health Problems	0	No	Multi-stem at base to stems suppressed south
5290		Yes		Blue Oak	Quercus douglasii	12,11	23	54	15	2 Major Structure or Health Problems	0	No	Codominant at 12". Vigor and density fair
5291		Yes		Interior Live Oak	Quercus wislizenii	4,3	7	54	10	1 Extreme Structure or Health Problems	0	No	Codominant at 6". Decay cavities base north side

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5292		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0	No	Decay cavity at base northwest. Suppressed above bow in trunk at 7'
5293		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	5	2 Major Structure or Health Problems	0	No	Suppress north above average dead branches vigor and density fair to poor
5294	Yes	Yes		Interior Live Oak	Quercus wislizenii	11,9,4	24.0	54	15	2 Major Structure or Health Problems	0	No	Multi-stem at base week attachments some inclusion. Three stems trunk and canopy lean north
5295		Yes		Blue Oak	Quercus douglasii	11.0	11.0	54	15	3 Fair - Minor Problems	11	No	Vertical structure good scaffolding vigor and density fair
5296		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	8	3 Fair - Minor Problems	9	yes	Suppressed above average dead branches lower canopy vigor and density fair to poor
5297		Yes		California Buckeye	Aesculus californica	13.0	13.0	54	10	3 Fair - Minor Problems	13	yes	Suppressed Codominant at 10'. Pruning wounds with the K exfoliation of branches 10' south
5298		Yes		Blue Oak	Quercus douglasii	8.0	8.0	54	10	3 Fair - Minor Problems	8	yes	Vertical structure good scaffolding up a corpsman growth in upper canopy vigor and density
5299		Yes		Blue Oak	Quercus douglasii	21.0	21.0	54	20	3 Fair - Minor Problems	21	yes	Call dumb at 15'. Above average dead branches appears to be Short twig

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													elongation. Vigor and density fair to poor
5300	Yes	Yes		Interior Live Oak	Quercus wislizenii	30	30	54	20	1 Extreme Structure or Health Problems	0	yes	Declining severely. 2 L west facing dead one failed included bark stem East fruiting bodies on the Kane Park north on trunk. One side is leaning canopy Southeast
5301		Yes		Interior Live Oak	Quercus wislizenii	20.0	20.0	54	20	2 Major Structure or Health Problems	0	yes	Codominant at 12" above average dead branches lower canopy from suppression vigor and density fair
5302		Yes		Blue Oak	Quercus douglasii	17.0	17.0	24	15	2 Major Structure or Health Problems	0	yes	Suppressed one-sided leaning canopy south
5303		Yes		Blue Oak	Quercus douglasii	13.0	13.0	36	10	2 Major Structure or Health Problems	0	yes	Codominant at 4'. Suppress south one side of leaning canopy north east.
5304		Yes		Blue Oak	Quercus douglasii	16.0	16.0	12	15	2 Major Structure or Health Problems	0	yes	Codominant at 36". Suppression south east one-sided Lee and canopy north west
5305	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,11,6 ,5,2,2,2	54	54	20	2 Major Structure or Health Problems	0	yes	Multi-stem at base week attachments decay cavity at base north

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5306		Yes		Interior Live Oak	Quercus wislizenii	15	15	54	20	2 Major Structure or Health Problems	0	No	Trunk and one sided canopy leaning north west
5307		Yes		California Black Oak	Quercus kelloggii	10.0	10.0	54	15	3 Fair - Minor Problems	10	No	Vertical structure Codominant at 15'. Vigor and density fair
5308		Yes		Blue Oak	Quercus douglasii	12.0	12.0	36	15	2 Major Structure or Health Problems	0	No	Suppress Southeast. One sided leaning canopy north west. Codominant at 4'
5309		Yes		California Black Oak	Quercus kelloggii	17.0	17.0	54	25	3 Fair - Minor Problems	17	No	Codominant at 20' minor canopy leaning south west
5310		Yes		Interior Live Oak	Quercus wislizenii	18.0	18.0	36	25	2 Major Structure or Health Problems	0	No	Codominant at 12". Inclusion. The cavity at base south bigger bigger intensity
5311		Yes		Blue Oak	Quercus douglasii	13.0	13.0	36	15	2 Major Structure or Health Problems	0	No	Codominant at 5'. Suppressed west one sided leaning canopy east
5312		Yes		California Black Oak	Quercus kelloggii	14.0	14.0	54	15	2 Major Structure or Health Problems	0	No	Codominant at 6'. Vigor and density fair
5313		Yes		California Black Oak	Quercus kelloggii	18.0	18.0	54	15	2 Major Structure or Health Problems	0	No	Vertical structure Codominant at 15' bigger and density fair
5314		Yes		California Black Oak	Quercus kelloggii	13.0	13.0	54	18	1 Extreme Structure or Health Problems	0	No	Low vertical stem 8" at 1 foot east trunk and canopy leaning south west bigger and density fair

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5315		Yes		California Black Oak	Quercus kelloggii	16.0	16.0	54	15	3 Fair - Minor Problems	16	No	Vertical structure Codominant at 15'. One clump of mistletoe above average dead branches lower canopy
5316		Yes		Interior Live Oak	Quercus wislizenii	8,6	14	54	12	2 Major Structure or Health Problems	0		Multi-stem at base 2 stems.
5317		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	10	2 Major Structure or Health Problems	0		Suppressed trunk and canopy leaving South East
5318		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	5	1 Extreme Structure or Health Problems	0		Suppressed one side of Lehman cannabis south
5319		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	15	2 Major Structure or Health Problems	0		Co dom at 10'. The suppressed south one sided leaning Canopy west
5320		Yes		Blue Oak	Quercus douglasii	21.0	21.0	54	20	2 Major Structure or Health Problems	0		Codominant at 7'. Trunk cavity South 40% DK
5321		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	10	3 Fair - Minor Problems	13		Vertical structure good scaffolding bigger and density fair
5322		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	12	2 Major Structure or Health Problems	0		Codominant at 7' suppressed east. One sided leaning canopy south
5323		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	15	2 Major Structure or Health Problems	0		Codominant at 6'. Some inclusion Trump flattens at 4' up to Codominant. Vigor and density fair

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5324		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	8	3 Fair - Minor Problems	12		Vertical structure good scaffolding density and vigor fair
5325		Yes		Blue Oak	Quercus douglasii	21.0	21.0	54	25	2 Major Structure or Health Problems	0		Codominant 7'. Trunk and canopy leaning north east
5326		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54		1 Extreme Structure or Health Problems	0		Suppressed above growing 18" south of large trunk
5327		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0		Suppressed above growing 12" east of large trunk severely one-sided leaning canopy south east
5328		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	12	2 Major Structure or Health Problems	0		Codominant at 20' trunk and canopy slight lean north west
5329		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	12	2 Major Structure or Health Problems	0		Suppressed west co dom arm at 10', one-sided leaning canopy east
5330		Yes		Blue Oak	Quercus douglasii	17.0	17.0	54	15	3 Fair - Minor Problems	17		Trunk cavity north 30% decay, vigor and density fair to poor. Codominant at 8'
5331		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	8	1 Extreme Structure or Health Problems	0		Suppressed one sided leaning canopy southwest
5332		Yes		Blue Oak	Quercus douglasii	14.0	14.0	54	20	2 Major Structure or Health Problems	0		Codominant at 9'. Suppressed severe one sided leaning canopy south.

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5333		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	15	2 Major Structure or Health Problems	0		Codominant 10'. Growing into canopies southwest in Northeast
5334		Yes		Grey pine	Pinus sabiniana	7.0	7.0	54	10	1 Extreme Structure or Health Problems	0	No	Suppressed canopy leans north
5335		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	20	2 Major Structure or Health Problems	0	No	Codominant at 12'. Suppressed south canopy lean north
5336		Yes		Grey pine	Pinus sabiniana	16.0	16.0	54	15	2 Major Structure or Health Problems	0	No	Codominant at 18'. Canopy has 2 leaders. bows on leaders
5337		Yes		Grey pine	Pinus sabiniana	22.0	22.0	54	20	2 Major Structure or Health Problems	0	No	Codominant at 35' trunk and canopy lean severe north
5338		Yes		Grey pine	Pinus sabiniana	22.0	22.0	54	20	2 Major Structure or Health Problems	0	no	Trunk and canopy lean severely south east
5339		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	6	1 Extreme Structure or Health Problems	0	no	Suppressed Codominant at 9'.
5340	Yes	Yes		California Black Oak	Quercus kelloggii	24	24	54	30	3 Fair - Minor Problems	24	no	Vertical structure good scaffolding
5341		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0	no	Suppressed trunk lean south co dom at 6'.
5342		Yes		California Black Oak	Quercus kelloggii	13.0	13.0	54	15	2 Major Structure or Health Problems	0	no	Codominant at 20'. Trunk and canopy lean South

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5343		Yes		California Black Oak	Quercus kelloggii	14	14	54	15	1 Extreme Structure or Health Problems	0	no	Low 8 inch vertical lateral dead north west. Severe tip die back in Crown, vigor and crown density very poor
5344		Yes		California Black Oak	Quercus kelloggii	10.0	10.0	54	12	2 Major Structure or Health Problems	0	no	Trunk and canopy severe lean south west
5345		Yes		California Black Oak	Quercus kelloggii	11	11	54	15	2 Major Structure or Health Problems	0	no	Suppressed severe trunk and canopy lean south west growing into canopies south
5346		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	10	2 Major Structure or Health Problems	0	no	Codominant at 22' suppressed north east vigor and density poor
5347		Yes		California Black Oak	Quercus kelloggii	9.0	9.0	54	10	2 Major Structure or Health Problems	0	no	Codominant at 20' above average dead branches trunk and Canopy lean, East. Vigor and density poor Poor
5348		Yes		California Black Oak	Quercus kelloggii	12.0	12.0	54	20	2 Major Structure or Health Problems	0	no	Codominant at 15'. 5" lateral dead south growing into canopies north and south
5349		Yes		Interior Live Oak	Quercus wislizenii	14.0	14.0	54	15	2 Major Structure or Health Problems	0	no	Codominant at 7'. Aggressive pruning Cuts at base south at 4' west. Trunk and cannot be lean Southeast vigor and density Poor

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5350		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	54	15	2 Major Structure or Health Problems	0	no	Codominant at 6'. Low vertical lateral at 12" Eastside 8" diameter. vigor and density fair
5351		Yes		California Black Oak	Quercus kelloggii	10,10	20.0	54	12	1 Extreme Structure or Health Problems	0	no	Codominant at 24" to stems. Declining health severe dead branches in canopy bigger intensity very poor
5352		Yes		California Black Oak	Quercus kelloggii	8.0	8.0	54	8	2 Major Structure or Health Problems	0	no	Suppressed Codominant at 20'. Canopy leans west
5353		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	6	1 Extreme Structure or Health Problems	0	Impacted	Suppressed Codominant at 10'. Severe dead branches vigor and density very poor trunk and can be lean South
5354		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	6	2 Major Structure or Health Problems	0		Co dom at 20'. Lower 2/3 canopy branches are dead from suppression vigor and density poor
5355		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	36	10	2 Major Structure or Health Problems	0	y	Codominant at 36" suppressed east one sided leaning canopy west
5356		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	10	1 Extreme Structure or Health Problems	0	y	Suppressed one sided severe leaning canopy north. Vigor intensity poor
5357		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	54	15	2 Major Structure or Health Problems	0	y	Codominant at 10'. Above average dead branches. Trunk and

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													canopy leaning north west
5358		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	15	2 Major Structure or Health Problems	0	y	Codominant at 10'. Suppressed south one-sided leaning canopy north above average dead branches lower canopy
5359		Yes		Blue Oak	Quercus douglasii	8.0	8.0	54	10	2 Major Structure or Health Problems	0	**y**	Good scaffolding trunk and canopy lean South
5360		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	36	15	1 Extreme Structure or Health Problems	0	**y**	Codominant at 4'. Suppressed. Severe leaning trunk in canopy east
5361		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	24	12	2 Major Structure or Health Problems	0	**y**	Codominant at 5'. Vigor and density fair
5362		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	12	1 Extreme Structure or Health Problems	0		Suppressed Codominant at 10' one-sided weaning can be West
5363		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	15	2 Major Structure or Health Problems	0		Codominant at 4'. Suppressed trunk and Canopy lean south west
5364		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	10	2 Major Structure or Health Problems	0		Codominant at 7'. Growing into canopies east west, above average dead branches, vigor and density fair to poor

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5365		Yes		Interior Live Oak	Quercus wislizenii	7,9	16.0	54	12	2 Major Structure or Health Problems	0		Codominant at base, 2 stems some inclusion. Suppressed trunk in Canopy lean north west
5366		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	54	10	2 Major Structure or Health Problems	0		Codominant at 15'. Canopy leans west
5367		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	20	2 Major Structure or Health Problems	0		Codominant on main stem at 20'. Above average dead branching north lateral at 7' exfoliation along bark, vigor and density Poor
5368		No		Toyon	Heteromeles arbutifolia	7.0	7.0	54	10	1 Extreme Structure or Health Problems	7		Codominant at base North stem dead exfoliation of bark on remaining trunk decay cavities throughout lower 2/3 trunk
5369		Yes		Interior Live Oak	Quercus wislizenii	13.0	13.0	54	15	2 Major Structure or Health Problems	0	**y**	Codominant at 6'. Trunk and canopy lean south west. In grading and soil disturbance in critical root zone north east
5370		Yes		Interior Live Oak	Quercus wislizenii	9,6	15.0	54.0	12.0	2 Major Structure or Health Problems	0	y	Codominant at base to stems growing into canopy west grading and soil disturbance in critical root zone east

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5371		Yes		Interior Live Oak	Quercus wislizenii	20	20.0	36.0	12.0	1 Extreme Structure or Health Problems	0	No	Trunk Bows severely to the north east at 36 inches. Canopy is trunk sprouts on top side mechanical wounds on east side from heavy equipment, vigor in density poor. decay cavity west side from base to 36 inches, 60% decay
5372		Yes		Interior Live Oak	Quercus wislizenii	13.0	13.0	54		2 Major Structure or Health Problems	0	No	Gall at root crown 360°. Codominant at 15' trunk and canopy severe lean West
5373		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	54.0	10.0	1 Extreme Structure or Health Problems	0	No	Previous trunk failure at roots, severe lean southwest, vigor and density fair to poor
5374		Yes		California Black Oak	Quercus kelloggii	8.0	8.0	54	10	2 Major Structure or Health Problems	0	No	Suppressed Codominant at 6'. Trunk and canopy lean slightly south west
5375		Yes		Interior Live Oak	Quercus wislizenii	15.0	15.0	54	20	1 Extreme Structure or Health Problems	0	No	Bow in trunk at 4' can be lean severe south. Vigor and density very poor 50% foliage remaining
5376	Yes	Yes		California Black Oak	Quercus kelloggii	19,8	27.0	54	25	2 Major Structure or Health Problems	0	No	Codominant base to stems larger stem is 19" diameter. Suppressed by larger tree trunk is 12" adjacent east.

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													Suppressed trunk in canopy lean Northwest
5377	Yes	Yes		California Black Oak	Quercus kelloggii	26,22	48.0	54	30	3 Fair - Minor Problems	48	No	Codominant at base with inclusion. Smaller stem is 22" suppressed by main trunk leans severely self. Vigor and density fair
5378		Yes		California Black Oak	Quercus kelloggii	17.0	17.0	54	15	1 Extreme Structure or Health Problems	0	No	Codominant at 36". South east leader failed decay and wound down to Heartwood. One remaining 17" stem leaning severely Northwest.
5379		Yes		Grey pine	Pinus sabiniana	12.0	12.0	54	10	3 Fair - Minor Problems	12	No	Vertical structure good scaffolding
5380		Yes		Grey pine	Pinus sabiniana	10.0	10.0	54	10	2 Major Structure or Health Problems	0	No	Suppress south canopy leans slightly north
5381		Yes		Grey pine	Pinus sabiniana	18.0	18.0	54	15	2 Major Structure or Health Problems	0	No	Trunk lean severely south east. Severe bow in trunk at 30'
5382		Yes		Grey pine	Pinus sabiniana	8.0	8.0	54	6	2 Major Structure or Health Problems	0	No	Vertical structure. Lower 2/3 of trunk suppressed dead branches

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5383		Yes		California Black Oak	Quercus kelloggii	12.0	12.0	54	20	2 Major Structure or Health Problems	0	No	Codominant at 22'. Lower canopy suppressed. Vigor and density fair
5384		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	15	1 Extreme Structure or Health Problems	0	No	Codominant at 4'. Suppressed. Trunk in canopy leaning south vigor and density poor
5385		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	54	10	1 Extreme Structure or Health Problems	0	No	Severe trunk decay cavity Westside 95% decayed up to 6' trunk and Canopy lean West, vigor and density poor
5386		Yes		Grey pine	Pinus sabiniana	8.0	8.0	54	8	2 Major Structure or Health Problems	0	No	Trunk lean slightly south
5387		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	10	1 Extreme Structure or Health Problems	0	No	Suppressed trunk and Canopy leaning severely west
5388		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	54	15	2 Major Structure or Health Problems	0	No	Codominant at 7'. Three branches lower canopy dead, vigor and density fair to poor
5389		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	8	1 Extreme Structure or Health Problems	0	no	Suppressed trunk and canopy lean severely West above average dead branches vigor and density Poor
5390		Yes		California Black Oak	Quercus kelloggii	15.0	15.0	54	18	2 Major Structure or Health Problems	0	no	Co dom at 10'. vigor and density fair. Slight lean southwest

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5391		Yes		Interior Live Oak	Quercus wislizenii	7,6,5,4,2,2,2,1,1,1	31	54	15	2 Major Structure or Health Problems	0	no	Multiple stems at base, weak attachments, suppressed growing into adjacnet canopies 360°
5392		Yes		California Black Oak	Quercus kelloggii	6.0	6.0	54	10	2 Major Structure or Health Problems	0	no	Co Dom at 8 feet. suppressed trunk, lean south west
5392		Yes		California Black Oak	Quercus kelloggii	6	6	54	10	2 Major Structure or Health Problems	0	no	Codominant at 8'. suppressed trunk in canopy lean south west
5393		Yes		California Black Oak	Quercus kelloggii	7	7	54	6	2 Major Structure or Health Problems	0	no	Codominant at 5'. Suppressed trunk and canopy leaning Southwest
5394		Yes		California Black Oak	Quercus kelloggii	11	11	54	15	1 Extreme Structure or Health Problems	0	no	Suppressed growth, trunk lean severely southwest, upper canopy corrected for sunlight
5395		Yes		Interior Live Oak	Quercus wislizenii	6	6	54	10	1 Extreme Structure or Health Problems	0	no	Suppressed west bow in trunk at 24" one sided leaning trunk and canopy east
5396	Yes	Yes		Interior Live Oak	Quercus wislizenii	13,11	24	54	15	2 Major Structure or Health Problems	0	no	Codominant at base, 2 stems with inclusion, larger stem South severe lean, canopy on ground. Above average dead branches vigor and density fair to poor

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5397		Yes		Valley Oak	Quercus lobata	13	13	54	15	2 Major Structure or Health Problems	0	no	Codominant at 15'. Tree appears to be stressed throughout lower canopy, above average dead branches
5398	Yes	Yes		Interior Live Oak	Quercus wislizenii	15,10,8	33	54	30	2 Major Structure or Health Problems	0	no	Codominant at 12", three stems suppressed, north trunk and canopies lean severely south
5399		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	15	1 Extreme Structure or Health Problems	0	no	Suppressed Codominant 8', one-sided severe leaning trunk and canopy southeast
5400		Yes		California Black Oak	Quercus kelloggii	18.0	18.0	54	18	2 Major Structure or Health Problems	0	No	Vertical structure Codominant at 15'. Vigor and density fair
5401		Yes		Interior Live Oak	Quercus wislizenii	7.0	7.0	54	6	1 Extreme Structure or Health Problems	0	No	Suppressed trunk and Canopy lean severely west, lower canopy suppressed, above average dead branches, vigor and density poor
5402		Yes		Grey pine	Pinus sabiniana	10.0	10.0	54	8	2 Major Structure or Health Problems	0	No	Lower canopy suppressed trunk leans moderately north west
5403		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	36	15	1 Extreme Structure or Health Problems	0	No	Codominant at 4'. Suppressed one sided leaning canopy north west

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5404		Yes		Grey pine	Pinus sabiniana	10.0	10.0	54	8	1 Extreme Structure or Health Problems	0	No	Suppressed trunk and canopy lean north decay cavity east side of trunk at 10'. Growing up through an oak tree.
5405		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	54	15	1 Extreme Structure or Health Problems	0	No	Suppressed south Codominant at 9'. Severely leaning trunk and canopy north. Pine tree growing through canopy north vigor and density Poor
5406		Yes		Grey pine	Pinus sabiniana	12.0	12.0	54	10	1 Extreme Structure or Health Problems	0	No	Suppressed, severe leaning trunk and canopy north east, above average dead branches, lower canopy
5407		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	10	1 Extreme Structure or Health Problems	0	No	Suppressed severely leaning trunk and canopy north west vigor and density poor Poor
5408		Yes		California Black Oak	Quercus kelloggii	9.0	9.0	54	10	2 Major Structure or Health Problems	0	No	Lower trunk leans moderately West, bow in trunk at 6', Codominant at 25'
5409		Yes		California Black Oak	Quercus kelloggii	6.0	6.0	54	8	2 Major Structure or Health Problems	0	no	Lower canopy suppressed
5410		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0	No	Suppressed trunk and canopy lean west severe dead branches lower

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													canopy vigor and density very poor
5411		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0	No	Suppressed Codominant at 18'. Trunk and canopy lean north west above average dead branches bigger in density poor
5412		Yes		California Black Oak	Quercus kelloggii	10.0	10.0	54	10	2 Major Structure or Health Problems	0	No	Suppressed self Codominant at 15' above average dead branches lower canopy trunk and canopy lean moderately north west
5413		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	2 Major Structure or Health Problems	0	No	Suppression growth Codominant at 15' one-sided leaning canopy Northwest
5414		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	54	10	1 Extreme Structure or Health Problems	0	No	Suppressed east severe trunk and canopy lean west above average dead branches lower canopy vigor and density poor
5415	Yes	Yes		Interior Live Oak	Quercus wislizenii	14,12,11,10	47.0	54	20	1 Extreme Structure or Health Problems	0	y	Multi-stem at base week attachments severe inclusion. Above average dead branches lower canopy bigger and density Poor

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5416		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	54	8	2 Major Structure or Health Problems	0	y	Codominant at 8' to southern leaders wrapping around with inclusion. Large pruning wounds west side from base to 36" bad cuts with tearing. Above average dead branches lower canopy
5417		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	8	1 Extreme Structure or Health Problems	0	y	Suppressed severe leaning trunk and canopy west
5418		Yes		Interior Live Oak	Quercus wislizenii	18.0	18.0	54	18	2 Major Structure or Health Problems	0	y	Codominant at 36". Low lateral at base southwest vigor and density fair
5419		Yes		Interior Live Oak	Quercus wislizenii	14.0	14.0	54	12	2 Major Structure or Health Problems	0	y	Moderately leaning trunk self Codominant at 8'. Growing into canopies east and west vigor and density fair to poor
5420		Yes		Interior Live Oak	Quercus wislizenii	7.0	7.0	54	15	1 Extreme Structure or Health Problems	0	y	Codominant at 15'. Suppression severe trunk and canopy lean north west
5421		Yes		Interior Live Oak	Quercus wislizenii	8,4,4,2,2	20	54	10	1 Extreme Structure or Health Problems	0	y	Trunk bows at 24" suppression. Codominant at base moderate trunk and Canopy lean, West

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5422		Yes		Interior Live Oak	Quercus wislizenii	11	11	54	12	1 Extreme Structure or Health Problems	0	y	Suppression. Codominant at 4'. Severe trunk lean south
5423	Yes	Yes		Interior Live Oak	Quercus wislizenii	10,9,9	28	54	15	2 Major Structure or Health Problems	0	y	Call down that base some inclusion growing into canopy self vigor and density fair
5424		Yes		Blue Oak	Quercus douglasii	13	13	54	15	3 Fair - Minor Problems	13	y	Vertical structure Codominant at 20' bigger and density fair
5819		Yes		Interior Live Oak	Quercus wislizenii	26	26	12	21	2 Major Structure or Health Problems	0	No	Codominant at 24", included bark, dead branches to 2"
5820		Yes		Blue Oak	Quercus douglasii	18	18	54	21	2 Major Structure or Health Problems	0	No	Growing next to rocks, leans NW, low branches, dead branches to 4"
5821		Yes		Blue Oak	Quercus douglasii	7	7	54	0	2 Major Structure or Health Problems	0	No	Fence post against trunk, leans W 30 deg, under 5822, above canal
5822		Yes		Interior Live Oak	Quercus wislizenii	11	11	54	14	1 Extreme Structure or Health Problems	0	No	Trunk horizontal at base, then vertical, above canal, poor crown density
5823	Yes	Yes		Interior Live Oak	Quercus wislizenii	10, 18, 12	40	54	19	2 Major Structure or Health Problems	0	Y	3 leaders at 12"; 10,18,12, growing on edge of canal
5824		Yes		Interior Live Oak	Quercus wislizenii	13	13	24	16	3 Fair - Minor Problems	13	Y	Codominant at 4', growing above canal
5918		Yes		Blue Oak	Quercus douglasii	24	24	54	32	3 Fair - Minor Problems	24	No	Codominant at 8', symmetric, in vineyard

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5970		Yes		Interior Live Oak	Quercus wislizenii	14,12,13,12,12	63	54	22	2 Major Structure or Health Problems	0	No	5stems at base, 14,12,13,12,12, on steep slope below dirt rd
5971		Yes		Blue Oak	Quercus douglasii	19	19	54	21	3 Fair - Minor Problems	19	Y	Codominant at 6'
5972		Yes		Valley Oak	Quercus lobata	13	13	54	21	3 Fair - Minor Problems	13	Y	
5972	Yes	Yes		Interior Live Oak	Quercus wislizenii	11, 16, 8	35	24	31	2 Major Structure or Health Problems	0	y	(A) 3 stems at base, 11,8,16, above canal
5973		Yes		Interior Live Oak	Quercus wislizenii	15	15	36	20	2 Major Structure or Health Problems	0	Y	Low E lateral at base, co dom at 42"
5974		Yes		Interior Live Oak	Quercus wislizenii	13	13	54	15	2 Major Structure or Health Problems	0	Y	Broken top, 1-sided crown W
5975		Yes											
5976		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	36	17	2 Major Structure or Health Problems	0	no	Leans W, swollen lower trunk, above canal
5977	Yes	Yes		Blue Oak	Quercus douglasii	24.0	24.0	36	35	1 Extreme Structure or Health Problems	0	Y	Decay in trunk, cavity at 30-54"
5978		Yes		Interior Live Oak	Quercus wislizenii	9, 6, 7	22.0	54	14	1 Extreme Structure or Health Problems	0	no	3 stems at base, 9,6,7; included bark, decay
5979	Yes	Yes		Interior Live Oak	Quercus wislizenii	8,9,9,6,9	41.0	54	19	1 Extreme Structure or Health Problems	0	no	5 stems at base, stump sprouts

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5980		Yes		Interior Live Oak	Quercus wislizenii	17.0	17.0	54	22	1 Extreme Structure or Health Problems	0	yes	2 stems at base, severe trunk decay, on edge of canal
5981		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	12	3 Fair - Minor Problems	9	no	Straight trunk, growing on edge of canal
5982		Yes		Interior Live Oak	Quercus wislizenii	22.0	22.0	12	21	1 Extreme Structure or Health Problems	0	yes	severe trunk decay, codominant at 30'
5983	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 6, 6	24.0	3	14	2 Major Structure or Health Problems	0	no	2 leaders at 12", 6&6, 1-sided crown
5984		Yes		Interior Live Oak	Quercus wislizenii	6, 5, 5	16.0	54	13	1 Extreme Structure or Health Problems	0	no	3 stems at base, 6,5,5, 1-sided crown
5985	Yes	Yes		Interior Live Oak	Quercus wislizenii	8, 12, 4, 3	27.0	54	21	1 Extreme Structure or Health Problems	0	no	4 stems at base, 8,12,4,3, stump sprouts, basal decay
5986		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	17	3 Fair - Minor Problems	13	no	Swollen base, leans W, at fence line
5987		Yes		Interior Live Oak	Quercus wislizenii	11, 10	21.0	54	18	1 Extreme Structure or Health Problems	0	no	2 stems at base, 11,10, severe basal decay, both stems lean, at fence line
5988		Yes		Interior Live Oak	Quercus wislizenii	8, 4, 7	19.0	54	14	1 Extreme Structure or Health Problems	0	no	4 stems at base, 4 " dead, basal decay
5989	Yes	Yes		Interior Live Oak	Quercus wislizenii	12, 10, 8	30.0	54	18	1 Extreme Structure or Health Problems	0	no	3 stems at base, incl bark, 8&10 lean out
5990	Yes	Yes		Interior Live Oak	Quercus wislizenii	7,3,5,8,3,9 ,4,5,7	51.0	54	15	1 Extreme Structure or Health Problems	0	no	10 stems at base, stump sprouts, basal decay,

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5991		Yes		Interior Live Oak	Quercus wislizenii	9, 5, 5	19.0	54	17	1 Extreme Structure or Health Problems	0	no	3 stems at base, 9,5,5, trunk sprouts, basal decay
5992	Yes	Yes		Interior Live Oak	Quercus wislizenii	18, 13, 3	34.0	54	26	1 Extreme Structure or Health Problems	0	no	3 stems at base, 18,13,3, basal decay, included bark, at fence line, barbed wire in trunk
5993		Yes		Blue Oak	Quercus douglasii	14	14	18	17	3 Fair - Minor Problems	14	no	Codominant at 4'
5994		Yes		Blue Oak	Quercus douglasii	13	13	54	16	3 Fair - Minor Problems	13	no	STRAIGHT stem
5995		Yes		Interior Live Oak	Quercus wislizenii	7, 5, 6	18	54	14	2 Major Structure or Health Problems	0	no	3 stems at base 7,5,6, stump sprouts,
5996		Yes		Blue Oak	Quercus douglasii	23	23	24	26	2 Major Structure or Health Problems	0	no	Trunk wound E 0-3, 3 leaders at 5&6, dead branches to 6"
5997		Yes		Interior Live Oak	Quercus wislizenii	9, 13, 10	32	18	22	1 Extreme Structure or Health Problems	0	no	3 stems at base, 9,13,10 stump sprouts, basal decay,
6901		Yes		Blue Oak	Quercus douglasii	8.2	8.2	54	15	2 Major Structure or Health Problems	0		Codominant at 8', one sided Crown West
6902		Yes		Interior Live Oak	Quercus wislizenii	9.6	9.6	54	17	3 Fair - Minor Problems	10		Bends in trunk mostly vertical, dead branches to 2".
6903		Yes		Blue Oak	Quercus douglasii	18.0	18.0	54	23	3 Fair - Minor Problems	18		Trunk wounds, dead branches to 4", low lateral at 6' and Codominants at 13'

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6904		Yes		Blue Oak	Quercus douglasii	10.3	10.3	54	16	3 Fair - Minor Problems	10		Low dead lateral at 6', codominant at 13', one sided Crown South,
6905		Yes		California Buckeye	Aesculus californica	11.0	11.0	54	13	3 Fair - Minor Problems	11		2 stems at base 7.6 &6.0, Broken branch on South leader symmetric
6906		Yes		Blue Oak	Quercus douglasii	13.5	13.5	54	21	4 Good - No Apparent Problems	14		Straight codominant at 18', dead branches to 2"
6907		Yes		Blue Oak	Quercus douglasii	18.0	18.0	36	21	3 Fair - Minor Problems	18		Codominant at 9' low lateral South at 5', small dead branches, and end weights
6908		Yes		Blue Oak	Quercus douglasii	6.1	6.1	42	10	3 Fair - Minor Problems	6		One sided round East Chama a small dead branches
6910		Yes		Blue Oak	Quercus douglasii	6.9	6.9	54	11	2 Major Structure or Health Problems	0		top bends South, base over rocks,
6911		Yes		Interior Live Oak	Quercus wislizenii	11.9	11.9	54	22	2 Major Structure or Health Problems	0		basal decay, 2 stems at base, 1-sided crown East,
6912		No		Blue Oak	Quercus douglasii	5.8	5.8	54	10	3 Fair - Minor Problems	5.8		undersized S of 6912
6912		Yes		Blue Oak	Quercus douglasii	7.8	7.8	54	13	3 Fair - Minor Problems	8		Slight bends in stem codominant at 7', small dead branches, 5.8" oak 6' S no tag
6913		Yes		Blue Oak	Quercus douglasii	12.4	12.4	54	17	2 Major Structure or Health Problems	0		Drunk wound northside 2'-10', co dom at 11', Dead branches to 4"

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6914		Yes		Blue Oak	Quercus douglasii	8.4	8.4	54	13	2 Major Structure or Health Problems	0		O South lateral head 5' one sided Crown sound, depressed growth South, khodom at 17'
6915		Yes		Blue Oak	Quercus douglasii	14.8	14.8	54	21	3 Fair - Minor Problems	15		Khodom at 19', horizontal leaders East and South
6916		Yes		Blue Oak	Quercus douglasii	11.8	11.8	48	23	2 Major Structure or Health Problems	0		CO dam at 6', dead branches to 2', East lateral or horizontal at 11'
6917		Yes		Blue Oak	Quercus douglasii	14.5	14.5	54	22	2 Major Structure or Health Problems	0		To stems at base 7 in stem under Crown of main trunk a low lateral South East , central leader
6918		Yes		Blue Oak	Quercus douglasii	6.8	6.8	54	10	3 Fair - Minor Problems	7		Central leader, Small dead branches
6919		Yes		Blue Oak	Quercus douglasii	14.9	14.9	54	21	3 Fair - Minor Problems	15		One sided Crown South, dead branches to 4", Co dom at 25'
6920		Yes		Blue Oak	Quercus douglasii	17.7	17.7	54	21	2 Major Structure or Health Problems	0		Sloped trunk 0 to 8', lateral at 8', co dom at 15', dead branches to 4"
6921		Yes		Blue Oak	Quercus douglasii	12.6	12.6	54	19	3 Fair - Minor Problems	13		Straight trunk co doms at 15' and 23', Dead branches to 3"
6922		Yes		Blue Oak	Quercus douglasii	14.3	14.3	54	22	1 Extreme Structure or Health Problems	0		low lateral S incl bark, bowed base S self-correcting, 1- sided crown & lean S

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6923		Yes		Interior Live Oak	Quercus wislizenii	22.1	22.1	6	23	2 Major Structure or Health Problems	0		Co dom at 2', is leader dead top and suppressed, West leader dead top
6924		Yes		Interior Live Oak	Quercus wislizenii	7.1	7.1	42	11	2 Major Structure or Health Problems	0		One sided Crown Northeast, low lateral at 5' and 7' east, mistletoe
6925		Yes		Interior Live Oak	Quercus wislizenii	7.2	7.2	54	13	2 Major Structure or Health Problems	0		Cut stump at base South, Co dom at 15', dead branches to 2"
6926		Yes		Interior Live Oak	Quercus wislizenii	6.6	6.6	54	9	2 Major Structure or Health Problems	0		Cut stem at base west, Trunk leans 20 deg South, Dead branches to 2", Co dom at 16'
6927		Yes		Interior Live Oak	Quercus wislizenii	7.8	7.8	24	11	2 Major Structure or Health Problems	0		Swollen base, low lateral at 36", leans South East, One sided Crown South East, 5.5" ilo 2' N
6928		Yes		Blue Oak	Quercus douglasii	6.7	6.7	54	10	3 Fair - Minor Problems	7		Central leader, slight lean East, small dead branches to 2"
6929		Yes		Blue Oak	Quercus douglasii	13.0	13.0	54	19	3 Fair - Minor Problems	13		Co dom at 12', dead branches to 3"
6930		Yes		Blue Oak	Quercus douglasii	15.5	15.5	54	20	3 Fair - Minor Problems	16		Swollen lower trunk, low lateral North at 12', Co dom at 15', small dead branches
6931		Yes		Blue Oak	Quercus douglasii	18.5	18.5	54	23	3 Fair - Minor Problems	19		Leans South from 10' to 30', one sided Crown to the North, West lateral bends growing East, dead branches to 6"

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6932		Yes		Blue Oak	Quercus douglasii	12.8	12.8	54	17	2 Major Structure or Health Problems	0		CO dom at 2', included bark, Co dom at 7' on East leader, dead branches to 2"
6933		Yes		California Buckeye	Aesculus californica	6.1	6.1	54	12	3 Fair - Minor Problems	6		Growing along cut edge of road, cut for road clearance, growing right next to into live oak # 6934
6934		Yes		Interior Live Oak	Quercus wislizenii	12.5	12.5	54	16	1 Extreme Structure or Health Problems	0		Growing along cut edge of road, decayNorth side, Co dom at 18", Crown leans South, Dead branches to 4"
6935		Yes		Interior Live Oak	Quercus wislizenii	12.0	12.0	54	19	1 Extreme Structure or Health Problems	0		Two stems and decay at base, stump sprouts growing at cut edge of road 8.1 and 7.2", West leader leans West South leader Vertical
6936		Yes		Interior Live Oak	Quercus wislizenii	14.4	14.4	54	17	2 Major Structure or Health Problems	0		Growing along North edge of road, Co dom at 10', 16', dead branch South on South leader to 6"
6937		Yes		Interior Live Oak	Quercus wislizenii	16.5	16.5	3	19	2 Major Structure or Health Problems	0	yes	Co dom at base 4' and 8', dead branches to 2", 2 stems at base, Leaders lean North and South

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6938		Yes		Interior Live Oak	Quercus wislizenii	16.8	16.8	30	23	2 Major Structure or Health Problems	0	yes	Swollen base, Co dom at 4', Dead branches to 4", E leader lean E, W leader leans W, 4.5" buckeye 15' North
6939		Yes		Blue Oak	Quercus douglasii	9.0	9.0	54	13	3 Fair - Minor Problems	9	yes	vertical growth, small dead branches
6940		Yes		Interior Live Oak	Quercus wislizenii	7.3	7.3	54	10	2 Major Structure or Health Problems	0	yes	Dead lateral West at 2', lanes South 30 deg, dead branches to 4"
6941		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	54	10	1 Extreme Structure or Health Problems	0	yes	Main leader mostly dead, low South lateral still alive
6942		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54		2 Major Structure or Health Problems	0	yes	Bends and leans Southwest, dead branches to 2", one sided Crown Southwest
6943		Yes		California Buckeye	Aesculus californica	13.0	13.0	54	16	3 Fair - Minor Problems	13	yes	2 stems at base, 8.3 and 7.7" Co dom at 6' and 9', Dead branches to 2", 4.5" blue oak 4' Northwest of tree
6944		Yes		Interior Live Oak	Quercus wislizenii	10.8	10.8	54	17	1 Extreme Structure or Health Problems	0	yes	Trunk wound East 0 to 3', Co dom at 5', 8', dead branches to 2"
6945		Yes		Interior Live Oak	Quercus wislizenii	10.5	10.5	42	21	2 Major Structure or Health Problems	0	yes	Swollen base, lean and twisted trunk West 10 deg, trunk wound at 15', small dead branches

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6946		Yes		Interior Live Oak	Quercus wislizenii	10.4	10.4	36	18	2 Major Structure or Health Problems	0	yes	Swollen base, trunk wound Northwest base, co dom at 4', dead branches to 4", low dead lateral E at 2, 24" blue oaks 10' NE and E no tags'
6947		Yes		Interior Live Oak	Quercus wislizenii	17.3	17.3	54	24	2 Major Structure or Health Problems	0	yes	broken branches South, Co dom at 8', dead branches to 6", leaders lean South and West
6948		Yes		Interior Live Oak	Quercus wislizenii	9.6	9.6	54	16	1 Extreme Structure or Health Problems	0	yes	Basal decay, Co dom at 36", dead branches to 3",
6949		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	15	3 Fair - Minor Problems	8	yes	Bending trunk West and South self correcting, co dom at 20', dead branches to 2"
6950		Yes		Interior Live Oak	Quercus wislizenii	11.2	11.2	54	20	2 Major Structure or Health Problems	0	yes	Many branches cut off, trunk leans South 30 deg
6951		Yes		Interior Live Oak	Quercus wislizenii	10.6	10.6	54	18	2 Major Structure or Health Problems	0	yes	Outside barbed wire fence, bending trunk self correcting, co doms twisted and included at 15', 2 stem blue oak 14' N, 4"&2" stems, untagged poor condition
6952		Yes		Interior Live Oak	Quercus wislizenii	22.0	22.0	54	21	1 Extreme Structure or Health Problems	0	yes	4 stems at base, 13,7,10,6"; stump sprouts, low branches

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6953		Yes		Interior Live Oak	Quercus wislizenii	12.2	12.2	6	16	2 Major Structure or Health Problems	0	no	4 stems at base, 5,8,7,5", low laterals, crossing branches, 4" ilo 2' E
6954		Yes		Oracle Oak	Quercus x morehus	13.6	13.6	54	19	3 Fair - Minor Problems	14	Impacted	Straight trunk, low lateral South, mistletoe
6955		Yes		Interior Live Oak	Quercus wislizenii	9.2	9.2	54	13	2 Major Structure or Health Problems	0	no	Trunk wound and low dead lateral at 3' South, heavy die back on central leader
6956		Yes		Blue Oak	Quercus douglasii	13.9	13.9	54	22	3 Fair - Minor Problems	14	**Impacted**	Slight lean South self correcting, co dom at 9', dead branches to 4"
6957		Yes		Interior Live Oak	Quercus wislizenii	6.8	6.8	54	13	1 Extreme Structure or Health Problems	0	**Impacted**	Slight bend in trunk 0 to 3' co dom at 8', dead branches to 2"
6958		Yes		Blue Oak	Quercus douglasii	11.6	11.6	42	19	3 Fair - Minor Problems	12	yes	Trunk going North, CO dom at 10', dead branches to 2"
6959		Yes		Interior Live Oak	Quercus wislizenii	16.7	16.7	12	24	2 Major Structure or Health Problems	0	yes	No West lateral at 2' included Bark, lean and one sided ground South 20' small dead branches
6960		Yes		Interior Live Oak	Quercus wislizenii	16.4	16.4	12	19	2 Major Structure or Health Problems	0	yes	One sided Crown and lean West, dead branches to 3", low lateral and 18" suppressed Southwest
6961		Yes		Interior Live Oak	Quercus wislizenii	8.5	8.5	54	14	2 Major Structure or Health Problems	0	yes	Trunk bends at 6' and leans West 45 deg one-sided Crown West small dead branches

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6962		Yes		Interior Live Oak	Quercus wislizenii	10.3	10.3	54	19	2 Major Structure or Health Problems	0	yes	Leans Southwest 45 deg angle, dead branches to 3", lower lateral at 6', included bark, 5.5" ilo 6' N untagged
6963	Yes	Yes		Interior Live Oak	Quercus wislizenii	26.1	26.1	54	30	3 Fair - Minor Problems	26	yes	Straight trunk, codom at 16', end wts, dead branches to 2"
6964	Yes	Yes		California Black Oak	Quercus kelloggii	26.8	26.8	54	33	3 Fair - Minor Problems	26	no	Straight trunk, full Crown slight lean Southeast, dead branches to 5"
6965		Yes		California Black Oak	Quercus kelloggii	12.6	12.6	54	17	2 Major Structure or Health Problems	0	no	Swollen base, low North lateral at 2' broken off at 7'
6966		Yes		Interior Live Oak	Quercus wislizenii	23.1	23.1	54	20	1 Extreme Structure or Health Problems	0	no	basal decay S, 1-sided crown leans NE 20 deg
6967		Yes		California Black Oak	Quercus kelloggii	8.5	8.5	54	12	2 Major Structure or Health Problems	0	no	Co dom at 6', Small dead branches, 1 of 2 in small tree grove
6968		Yes		California Black Oak	Quercus kelloggii	10.9	10.9	54	18	2 Major Structure or Health Problems	0	no	Twisting trunk upward small laterals, 2nd tree of 23 in small grove above barbed wire fence
6969		Yes		California Black Oak	Quercus kelloggii	7.0	7.0	54	10	3 Fair - Minor Problems	7	no	Bending trunk, co doms at 20' small dead branches
6970	Yes	Yes		Interior Live Oak	Quercus wislizenii	29.5	29.5	3	34	2 Major Structure or Health Problems	0	no	Codominant at base 3 l at 18" -13", 11", 19", dead branches to 11 and thin foliage

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
6971		Yes		California Black Oak	Quercus kelloggii	9.1	9.1	54	10	3 Fair - Minor Problems	9	no	Leans South go down at 18'
6972		Yes		Interior Live Oak	Quercus wislizenii	9.7	9.7	54	16	3 Fair - Minor Problems	10	yes	Leans Southwest, small dead branches to 2",
6973		Yes		Blue Oak	Quercus douglasii	8.8	8.8	54	21	2 Major Structure or Health Problems	0	yes	Bow in trunk 0 to 3', trunk wound 0 to 3' East Side Co dom at 10' heavy, small branch die back to 2"
6974		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	54	14	2 Major Structure or Health Problems	0	yes	Low lateral Northwest at 5', heavy branch die back
6975		Yes		Blue Oak	Quercus douglasii	7.4	7.4	54	13	3 Fair - Minor Problems	7	yes	Top leans South at 20', small dead branches the 2", bends in trunk,5.6" ilo 14' NE downhill no tag
9351		Yes		California Black Oak	Quercus kelloggii	15.0	15.0	54	26	3 Fair - Minor Problems	15	No	
9354	Yes	Yes		Blue Oak	Quercus douglasii	18, 13	31.0	54	26	4 Good - No Apparent Problems	31	yes	Codominant at ground, smaller stem leans, fair vigor
9355		Yes		Blue Oak	Quercus douglasii	15.0	15.0	54	16	3 Fair - Minor Problems	15	yes	Narrow codom at 7' fair canopy
9356		Yes		Blue Oak	Quercus douglasii	17.0	17.0	54	20	3 Fair - Minor Problems	17	yes	Mostly one-sided canopy se
9357		Yes		Blue Oak	Quercus douglasii	15.0	15.0	24	18	3 Fair - Minor Problems	15	yes	sparse in upper canopy, epicormic sprouting
9358		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	21	3 Fair - Minor Problems	16	yes	Moderate decline in canopy likely due to new road cut

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
9359		No		Blue Oak	Quercus douglasii	5.0	5.0	54	7	3 Fair - Minor Problems	5	yes	
9360		Yes		Interior Live Oak	Quercus wislizenii	22.0	22.0	24	30	2 Major Structure or Health Problems	0	yes	Large pruning wounds all the way around and associated canopy decline
9361		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	14	3 Fair - Minor Problems	10	yes	
9362		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	36	16	3 Fair - Minor Problems	8	yes	
9363		Yes		Interior Live Oak	Quercus wislizenii	16.0	16.0	12	21	2 Major Structure or Health Problems	0	yes	Codominant with included bark crossing limbs low lateral fair vigor
9364		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	12	3 Fair - Minor Problems	12	yes	Narrow attachment at 6'
9365		Yes		Blue Oak	Quercus douglasii	12.0	12.0	54	15	3 Fair - Minor Problems	12	yes	2 to 3" limb die back in lower canopy
9366		Yes		Interior Live Oak	Quercus wislizenii	18.0	18.0	54	25	3 Fair - Minor Problems	18	yes	Low laterals, will need clearance pruning within canopy zone
9367		Yes		Blue Oak	Quercus douglasii	10.0	10.0	54	12	3 Fair - Minor Problems	10	yes	
9368		Yes		Interior Live Oak	Quercus wislizenii	11.0	11.0	18	16	3 Fair - Minor Problems	11	yes	Low laterals
9369		Yes		Blue Oak	Quercus douglasii	16.0	16.0	54	24	3 Fair - Minor Problems	16	yes	
9370		Yes		Blue Oak	Quercus douglasii	6.0	6.0	18	8	3 Fair - Minor Problems	6	yes	

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
9372		Yes		Grey pine	Pinus sabiniana	13.0	13.0	54	15	2 Major Structure or Health Problems	0	No	leans
9373		Yes		California Black Oak	Quercus kelloggii	7.0	7.0	54	12	3 Fair - Minor Problems	7	No	
9374		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	8	2 Major Structure or Health Problems	0	No	Fenceline, poor crown ratio
9375		Yes		California Buckeye	Aesculus californica	6.0	6.0	54	10	3 Fair - Minor Problems	6	No	
9376		Yes		California Black Oak	Quercus kelloggii	9.0	9.0	54	15	3 Fair - Minor Problems	9	No	Codom at 10
9377		Yes		Grey pine	Pinus sabiniana	16.0	16.0	54	15	1 Extreme Structure or Health Problems	0	No	
9378		Yes		California Black Oak	Quercus kelloggii	9.0	9.0	54	12	3 Fair - Minor Problems	9	No	
9379		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	14	1 Extreme Structure or Health Problems	0	No	Poor structure, understory
9380		Yes		California Black Oak	Quercus kelloggii	9.0	9.0	54	12	2 Major Structure or Health Problems	0	No	Moderate lean Codom at 10'
9381		Yes		California Black Oak	Quercus kelloggii	18.0	18.0	54	20	3 Fair - Minor Problems	18	No	Supported lean, Codominant at 10' moderate canopy decline
9382		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	36	16	2 Major Structure or Health Problems	0	No	Understory

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
9383		Yes		California Black Oak	Quercus kelloggii	16.0	16.0	54	18	2 Major Structure or Health Problems	0	No	Seem in trunk from 5 to 10'
9384		Yes		Interior Live Oak	Quercus wislizenii	9.0	9.0	36	20	1 Extreme Structure or Health Problems	0	No	Low laterals, understory structure, moderate canopy decline
9385		Yes		California Black Oak	Quercus kelloggii	15.0	15.0	36	20	3 Fair - Minor Problems	15	No	
9386		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	3	12	2 Major Structure or Health Problems	0	No	Poor structure, narrow connections
9387		Yes		California Black Oak	Quercus kelloggii	7.0	7.0	54	7	2 Major Structure or Health Problems	0	No	Poor vigor, mostly epicormic sprouts
9388		Yes		Interior Live Oak	Quercus wislizenii	13.0	13.0	1	15	1 Extreme Structure or Health Problems	0	No	Decay at ground and below 1 foot
9389		No		Blue Oak	Quercus douglasii	5.0	5.0	54		3 Fair - Minor Problems	5	No	undersized
9390		Yes		Blue Oak	Quercus douglasii	7.0	7.0	54	10	3 Fair - Minor Problems	7	No	
9391		No		Blue Oak	Quercus douglasii	5.0	5.0	54		3 Fair - Minor Problems	5	yes	undersized
9392		Yes		Interior Live Oak	Quercus wislizenii	8.0	8.0	54	12	2 Major Structure or Health Problems	0	yes	Severe lean with correction and pour structure
9393		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	54	15	1 Extreme Structure or Health Problems	0	yes	Too much decay

Field Tag #	Signif-icant	Pro-tected By Code	Off site	Species Common Name	Species Botanical Name	DBH (in)	Total Diameter Inches (muti stems added together)	Ht Dia Meas at (in)	Canopy Radius	Condition Rating	Total Mitigation Inches	Trees not impacted by proposed project	Notes
9394		Yes		Blue Oak	Quercus douglasii	6.0	6.0	54	8	2 Major Structure or Health Problems	0	yes	bows at top
9395		Yes		Interior Live Oak	Quercus wislizenii	6.0	6.0	54	7	2 Major Structure or Health Problems	0	yes	One sided canopy from suppression
9396		Yes		California Black Oak	Quercus kelloggii	6.0	6.0	54	8	3 Fair - Minor Problems	6	yes	
9397		Yes		Interior Live Oak	Quercus wislizenii	7.0	7.0	54	12	2 Major Structure or Health Problems	0	yes	Understory trunk bends and suppressed, one sided canopy
9398		Yes		Interior Live Oak	Quercus wislizenii	10.0	10.0	6	12	2 Major Structure or Health Problems	0	yes	Low laterals poor crown density
9399		No		Interior Live Oak	Quercus wislizenii	5.0	5.0	54		3 Fair - Minor Problems	5	yes	
							8460.26						

APPENDIX G

CULTURAL RESOURCES STUDY

7615 CALLISON ROAD WINERY PROJECT (BEM-08)

PENRYN, PLACER COUNTY, CALIFORNIA



LSA

April 2021

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CULTURAL RESOURCES STUDY

7615 CALLISON ROAD WINERY PROJECT (BEM-08)

PENRYN, PLACER COUNTY, CALIFORNIA

Submitted to:

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April 2021

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EXECUTIVE SUMMARY

LSA prepared this cultural resources study for the proposed 7615 Callison Road Winery Project, Penryn, Placer County, California. The study was conducted as part of project review under the California Environmental Quality Act (CEQA) to (1) identify cultural resources in the Project site that may qualify as historical resources or unique archaeological resources; (2) identify human remains, including those interred outside of formal cemeteries; and (3) assess the potential for impacts to such resources and remains, if present, as a result of project implementation. The study consisted of background research, including a records search and a literature review of the Project site; a field survey; a Sacred Lands File search with the Native American Heritage Commission; and outreach to the Placer County Historical Society.

No historical resources as defined by CEQA will be impacted by the proposed project. The study identified three historic-period cultural resources within the Project Site. Two resources (Antelope Canal and Callison Road) do not meet the definition of a historical resource under CEQA because they are not eligible for listing in the California Register of Historical Resources and are not listed in a local historical inventory; therefore, they do not require any additional consideration. The historic-period cultural resource identified in the Project Site is the Central Pacific Transcontinental Railroad, and although the Project Site includes a portion of the railroad right-of-way (ROW), the project does not propose any changes to the rail bed, ballast, or any other contributing features of this historic-period resource. The only project design feature within the railroad ROW will consist of the Callison Road tie-in. The project will not result in any impacts to the Central Pacific Transcontinental Railroad. The possibility of encountering subsurface archaeological deposits and/or human remains during project implementation is low. Although the likelihood of discovery is low, the Recommendations section provides procedures that should be followed to mitigate potential significant impacts to inadvertent discoveries of such resources and/or remains.

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Figure 2: Project Location
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B: NATIVE AMERICAN HERITAGE COMMISSION CORRESPONDENCE
C: HISTORICAL SOCIETY CONSULTATION
D: CULTURAL RESOURCES RECORDS

1.0 INTRODUCTION

LSA was retained by Building Engineering & Maintenance, Inc. (BEM), to prepare a Cultural Resources Study for the 7615 Callison Road Winery Project in Penryn, Placer County, California (Project) (Appendix A: Figures 1-3). The Project would include development of a winery, including a vineyard, four structures, and associated infrastructure. The Project Site, as delineated for purposes of this Cultural Resources Study, is the Area of Direct Impact (ADI) and encompasses 17.97 acres comprising portions of three parcels: Assessor Parcel Numbers (APNs) 031-220-061-000, 032-124-080-000, and 032-124-044-000. The Project Site is located in Township 12 North, Range 7 East, Sections 23, 26, and 27 of the Mount Diablo Base Line and Meridian as depicted on the United States Geological Survey (USGS) *Rocklin, Calif.* topographic quadrangle (Appendix A: Figure 2). The Project Site, as defined in this study, includes all areas where potential historical and archaeological cultural resources could be affected by the proposed Project. A larger preliminary Study Area was used for purposes for the records search, Sacred Lands file search, and consultation with the local historical society (see Section 5 of this report). The preliminary Study Area was much larger than the Project Site (77.99 acres total) and included preliminary design and access features that have since been removed from the Project description. The portions of the preliminary Study Area that are no longer needed for the Project were removed from the refined 17.97-acre Project Site. The Project does not have the potential to cause impacts on cultural resources in those areas that were included in the preliminary Study Area but excluded from the refined Project Site.

LSA conducted this study in support of environmental review of the Project in accordance with the requirements of the California Environmental Quality Act (CEQA). This study consisted of records and Sacred Lands File searches, a literature review, historic-period map review, outreach to potentially interested parties, and a field survey. The purpose of this study is to (1) identify cultural resources in the Project Site that may meet the definition of a historical resource (Public Resources Code [PRC] §21084.1) or unique archaeological resource (PRC §21083.2(g)); (2) identify human remains in the Project Site; (3) assess potential impacts to such resources and remains; and (4) provide mitigation recommendations that would avoid or substantially reduce the severity of such impacts.

2.0 PROJECT DESCRIPTION

The proposed project consists of development of a full-production winery, including grape vineyards, wine production facilities, tasting room, accessory restaurant and associated facilities on approximately 18.0 acres within three separate, contiguous parcels, which combined, total 44.14 acres (APN 031-220-061, 032-124-080, and 032-124-044).

When fully operational, the winery will process grapes grown on site and purchased from specialized vineyards and will produce over 20,000 cases of wine annually.

2.1 PROPOSED FACILITIES

2.1.1 Vineyard

A minimum of two acres of vineyard will be planted onsite in accordance with Placer County Code Section 17.56.330, Winery and Farm Breweries.

2.1.2 Guard Shack

The guard shack will be located adjacent to the gates at the main entrance north of the roundabout. It will consist of a small building with a bathroom and will house controls for the gates and exterior lighting for the entrance and lower roadway.

2.1.3 Utility Building

The utility building hosts the main electrical service, interlock to an adjacent diesel generator, interlock to solar arrays, multiple water pumps, miscellaneous utility distribution and maintenance equipment storage.

2.1.4 Processing Building

The processing building supports bottling, product storage, supply storage, equipment storage, shipping and receiving with an enclosed truck dock. It covers a ground level, mezzanine level, and seating area on the roof for a scenic overlook. This building is also linked to the octagon building at the top of the hill by a continuous meandering walkway providing a scenic surface connection between the two buildings.

2.1.5 Octagon Building

The octagon building sits atop the hill. The first level is 20 feet below grade and houses the upper incoming grape processing. The building's ground level has an octagonal shape with a living façade comprised of an exoskeletal structure covered with plant life to ensure it will blend in with its environment. This level has a porte cochère where wine can be picked up by patrons and which serves as the point of entry to the reception area where there are two elevators as well as stairs for access to the upper levels, the below-grade processing level and the wine caves below to a maximum depth of 75 feet below grade. There will also be a restroom, administration area, and an outdoor terrace on this level. The second level will house the caretaker's suite. The third level will contain the commercial kitchen, storage and patron bathrooms. The fourth level will be the tasting

room/accessory restaurant offering a panoramic view of Placer County to the patrons with a perimeter turn table floor slowly rotating the patrons 360 degrees every 45 minutes. This level will be circular in shape. A third elevator for staff use serves levels three and four. The fifth and final is used to facilitate gravity filtration of the wine during processing. This is carried out by bringing the unfinished wine to the top level in vessels and allowing it to flow down to the level of the wine cave in the heart of the hillside. This vertical journey creates the necessary pressure for the wine to be filtered without the use of pumps which is critical for achieving the highest quality product possible. This building will reach an approximate height of 75 feet above ground.

2.1.6 Wine Cave

The wine cave will be constructed below ground at a maximum depth of 75 feet below grade. The planned layout consists of a fermentation tank room, barrel aging rooms, two meeting rooms and two restrooms. Access is achieved by way of the aforementioned elevator shaft as well as two additional pedestrian exits.

2.2 CIRCULATION

Primary vehicular access to the site will be provided directly from Callison Road, approximately 2,400 feet west of Callison Road's intersection with Taylor Road. Callison Road would be raised three feet at the winery entrance to eliminate an existing dip and improve visibility for egress from the project. Minimal other improvements are proposed to Callison in order to maintain the rural nature of the existing roadway.

Onsite circulation begins with a 150-foot diameter roundabout circling a well landscaped planter with a picturesque statue in the center. A gated entry leads to a private drive designed to meet County requirements with a minimum width of 20-foot paved surface plus 2-foot shoulders gently weaving its way toward the processing building. The drive then leads to the octagon building where there is an additional roundabout on top of the hill allowing directional change for larger vehicles.

3.0 LEGISTLATIVE AND REGULATORY CONTEXT

3.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations [CCR] Title 14(3) §15002(i)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (CCR Title 14(3) §15064.5(b)).

CEQA §15064.5(a) defines a "historical resource" as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources;
- Listed in a local register of historical resources (as defined at PRC §5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of §5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency (CCR Title 14(3) §15064.5(a)).

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets one or more of the criteria for listing in the California Register of Historical Resources" (CCR Title 14(3) §15064.5(a)(3)).

If the cultural resource in question is an archaeological site, CEQA (CCR Title 14(3) §15064.5(c)(1)) requires that the lead agency first determine if the site is a historical resource as defined in CCR Title 14(3) §15064.5(a). If the site qualifies as a historical resource, potential adverse impacts must be considered in the same manner as a historical resource. If the archaeological site does not qualify as a historical resource but does qualify as a unique archaeological resource, then the archaeological site is treated in accordance with PRC §21083.2 (CCR Title 14(3) §15069.5(c)(3)). In practice, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource.

If an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource.

3.2 CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, association, and

- are associated with events that have made a significant contribution to the broad patterns of our history, or
- are associated with the lives of persons significant in our past; or
- embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- yield, or may be likely to yield, information important in prehistory or history.

Integrity is the authenticity of a property's physical identity, evidenced by the survival of characteristics that existed during the property's period of significance. Properties eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources, and to convey the reasons for their significance. Integrity must also be judged with reference to the particular criteria under which properties are proposed for eligibility. Alterations over time to a property, or historic changes pertaining to use, may themselves have historical, cultural, or architectural significance.

3.3 CALIFORNIA HEALTH AND SAFETY CODE §7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

3.4 CALIFORNIA PUBLIC RESOURCES CODE §5097.98

Section 5097.98 of the California Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Part 7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant or "MLD") it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

3.5 PLACER COUNTY GENERAL PLAN

The Project site is within the Placer County General Plan jurisdiction and the Horseshoe Bar/Penryn Community Plan. General Plan Land Use designation is Rural Residential 1-10 Ac Minimum and Rural Residential 2.3-4.6 acre minimum. Zoning is F-B-X 20 acre minimum and RA-B-100. The Project site is not located in a Specific Plan within Placer County.

3.5.1 Placer County General Plan Cultural Resources Goals and Policies

3.5.1.1 Goals

Goal 5.D: To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

3.5.1.2 Policies

5.D.1. The County shall assist the citizens of Placer County in becoming active guardians of their community's cultural resources.

5.D.2. The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

5.D.3. The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

5.D.4. The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County's paleontological and archaeological resources.

5.D.5. The County shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.

5.D.6. The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a countywide cultural resource database, to be maintained by the Division of Museums.

5.D.7. The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

5.D.8. The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

5.D.9. The County shall use the State Historic Building Code to encourage the preservation of historic structures.

5.D.10. The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

5.D.11. The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.

5.D.12. The County shall consider acquisition programs (i.e. Placer Legacy Open Space and Agricultural Conservation Program) as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, the Native American community, and local land trusts.

3.5.2 Horseshoe Bar/Penryn Community Plan Cultural and Paleological Goals and Policies

3.5.2.1 Goals

a. Preserve and protect the significant paleontological, prehistoric, historical, and natural resources, individually and collectively for future generations.

b. Assist the citizens of the plan area in becoming active guardians of their community's cultural resources. Explore incentive programs to encourage the preservation and enhancement of cultural resources.

c. Coordinate and cooperate with the surrounding jurisdictions for the mutual goal of preserving the cultural heritage of Placer County. Encourage neighboring communities to undertake cultural resources inventory to create a complete record of cultural resources for Placer County.

d. Initiate contact with local Native American organizations and representatives to assure that the Native American community has early access to the planning process.

3.5.2.2 Policies

a. Identify and protect from damage, destruction and abuse, Placer County's important historical, archaeological, and cultural sites and their contributing environment (i.e., setting). When possible, incorporate these resources, particularly historical vegetation or vista points, into Open Space areas.

b. Create and implement a Placer County Cultural Resources Ordinance to identify, evaluate and mitigate impact to all categories of significant cultural and natural resources.

c. Require site-specific studies as part of the environmental review process, for paleontological, prehistoric, historical and natural elements in all instances where land development or property demolition has the potential to have a detrimental impact on a possibly significant cultural resource or historic structure (i.e. buildings aged 45 years or older). Whenever possible, projects should be planned to avoid adverse impacts to cultural resources. Avoidance strategies are preferred over mitigation of the impacts.

d. Develop an effective program of landmark designation, utilizing the standards of the existing state and national programs, and develop local criteria to assure that significant cultural resources are recognized and protected. All documentation of cultural resources shall conform to the standards and formats recommended by the California Office of Historic Preservation

e. Develop an effective educational program which stresses the importance of the County's cultural resources, and purports ways to maintain the integrity of these resources. Encourage the owners of both identified and unidentified cultural resources to perceive these resources as assets rather than liabilities.

f. Develop a master plan for the acquisition and management of cultural and natural resources that are either very significant to the region, or are in imminent danger of destruction.

g. Structures of historic or architectural significance shall be identified and documented, and efforts shall be made for their preservation.

h. Use existing and promote proposed legislation for the identification and protection of cultural resources.

i. Designate the stand of historical palm trees located along English Colony, Butler, Del Mar, Sisley, Clark Tunnel, and Newcastle Roads as "landmark" trees pursuant to the Placer County Tree Ordinance.

j. Protect portions of Taylor Road from the east entrance of the Newcastle tunnel to Callison Road, and Sisley Road from Callison Road to Taylor Road, as historical resources that should be maintained in their historic concrete fabric. (Board of Supervisors' Resolution #93-289).

3.6 SENATE BILL 18

Senate Bill 18 (SB 18) was signed into law in 2014 and requires a lead agency to consult with California Native American tribes during local land use planning in order to aid in the protection of traditional tribal cultural places. The intent of the consultation is to provide California Native American tribes the opportunity to participate and provide protection or mitigation recommendations to avoid or reduce impacts to cultural places during the early planning stage.

SB 18 refers to Public Resources Code §5097.9 and 5097.995 to define cultural places as:

a. Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (Public Resources Code §5097.9).

b. Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC §5097.995).

Local agencies are responsible for notifying and consulting Native American tribes if the following applies:

a. Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

b. Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NARC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45 day comment period (Government Code §65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.

c. Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code §65092).

The project proposes construction of a winery on land zoned residential (RA) and forest (F-B-X). The Project does not involve an amendment to a specific plan or general plan but would be permitted through the acquisition of a minor use permit from the County. Should the project result in a rezoning or land use change from that presented in the General Plan, and if that change is determined by the County to warrant an amendment to the General Plan, SB 18 would apply to this project. The County is ultimately responsible for determining if SB 18 applies.

4.0 PROJECT SETTING

4.1 ENVIRONMENT

The Project Site is located on the eastern outskirts of the Sacramento Valley at its interface with the base of the western slopes of the Sierra Nevada. The Sacramento Valley forms the northern portion of California's Great Central Valley, which is characterized by an alluvial valley floor; as such, the Valley is geologically known as a structural trough that has consistently collected redeposited sediment eroded from surrounding mountain ranges since the Jurassic Period (160 million B.P.). The Project Site generally consists of low rolling hills with an average elevation of 800 feet above mean sea level, elevation increases to the northeast corner of the Project Site with average slopes of 13 percent incrementally increasing to a maximum slope of 40 percent (Google Earth 2020).

The Project Site consists of open, mostly undeveloped land currently used for cattle grazing and access to the Antelope Canal maintained by the PCWA. Antelope Creek is the closest water source to the Project Site, located adjacent to the east near Callison Road. Native vegetation in the region consists of California grasslands with central oak woodland features that are still observable today. The Project Site consists of interior live oak, valley oak and gray pines, as well as various grasses, poppies, and lupines (Kuchler 1964; Wilson 2013).

4.2 PRECONTACT

The Sacramento Valley area was probably settled by native Californians between 10,000 and 4,000 B.C. (Moratto 1984). The Paleo-Archaic-Emergent cultural sequence developed by Fredrickson (1974) is commonly used to interpret the prehistoric occupation of Central California. The sequence is broken into three broad periods:

- The Paleoindian period (10,000-6000 B.C.) began with the first entry of people into California. These people probably subsisted mainly on big game and to a lesser extent on plant foods, with few or no trade networks (Moratto 1984). Current research, however, indicates more plant processing, trading, and sedentism than previously thought.

- The Archaic period (Lower Archaic, 6000-3000 B.C.; Middle Archaic, 3000-1000 B.C.; and Upper Archaic, 1000 B.C.-500 A.D.) is characterized by increased use of plant foods, elaboration of burial and grave goods, and increasingly complex trade networks (Bennyhoff and Fredrickson 1994; Moratto 1984).

- The Emergent period (500-1800 A.D.) is marked by the introduction of the bow and arrow, the ascendance of wealth-linked social status, and the elaboration and expansion of trade networks, signified in part by the appearance of clam disk bead money (Moratto 1984).

Human populations during the Paleoindian period in the vicinity of the Project Site were low and probably consisted of small groups moving frequently in order to exploit plant and animal resources.

The Central Valley has had many population movements and waves of cultural influence from neighboring regions; it was probably first occupied at the end of the Pleistocene, as evidenced by core and flake tools (Moratto 1984:214-5). Hokan speakers may have been the early occupants of the Central Valley, eventually displaced by migrating Penutian speakers (ancestral Nisenan) coming from areas outside California. They most likely entered the Central Valley in several minor waves, slowly replacing the original Hokan speakers, causing them to migrate to the periphery of the Valley (Elsasser 1978:41). By about A.D. 300-500, the Penutian settlement of the Central Valley was complete.

Evidence of ancestral Nisenan culture appears around 700 A.D. in western Placer County in the form of small projectile points. After 1,500 A.D., a highly developed exchange network with shell bead currency appears, with "exotic obsidian from the eastern Sierra and the North Coast Ranges, coastal shells, and distinctive projectile points showing up one hundred miles or more from their source" (Terhorst and Gerike 1992).

4.3 ETHNOGRAPHY

The Project Site exists within the ethnographic territory of the Southern Maidu or Nisenan (Kroeber 1925; Wilson and Towne 1978). The Nisenan are part of the California Penutian linguistic family, which is further divided into four subfamilies: Wintuan, Maiduan, Yokutsan, and Utian. The Nisenan belong to the Maiduan subfamily, along with the Maidu and Konkow (Shipley 1978). The territory of the Nisenan, which includes the drainage of the American River, extended from the crest of the Sierra Nevada in the east to the Sacramento River in the west; as far south as the Cosumnes River; and north to the divide of the North Fork of the Yuba River and Middle Fork of the Feather River.

The Nisenan are divided into the Hill and Valley socio-political groups, which were further divided into "tribelets" that exerted political control over particular geographical areas. Valley Nisenan usually located their settlements on low, natural rises, knolls along streams and rivers, or on gentle slopes with southern exposures. The Nisenan lived in semi-permanent settlements, consisting of one village, or a number of smaller villages clustered around one large village. Family groups often lived away from the main village and had seasonal camps for resource procurement (Wilson and Towne 1978). Their houses were conical-shaped with coverings of bark, skins, and brush. Brush shelters were used in the summer and during gathering excursions. Most villages had bedrock mortar sites and acorn granaries (Wilson and Towne 1978).

The Nisenan relied heavily on acorns, local game, and fish for subsistence. Acorns were gathered communally or individually. Deer, bear, salmon, birds, and rabbits were important in the Nisenan diet, along with insects such as grasshoppers, crickets, and locusts. Freshwater mussels were also eaten, along with a variety of berries, wild plums, and grapes, and manzanita cider was a preferred beverage (Kroeber 1925; Wilson and Towne 1978).

Stone tools used by the Nisenan included knives, projectile points, arrow straighteners, scrapers, pestles, mortars, and pipes (Wilson and Towne 1978). Wooden digging sticks were used for procuring roots and other food resources, and wooden mortars were used for food preparation (Kroeber 1925). Tule was used for mats, netting, fish nets, and for canoes. Willow and redbud were

preferred materials for weaving baskets. Baskets were used for food storage and cooking, cradles, seed beaters, and cages (Wilson and Towne 1978).

The lifeways of the Nisenan changed drastically in the mid-19th century beginning with Spanish and American incursions into their territory. During the 1800s, infectious European disease and the influx of European settlers had devastating effects on Native Californians (Wilson and Towne 1978:396).

4.4 HISTORY

Spanish explorations of California were driven by religious pursuits. Determined to reduce what was considered heathenism in the world, the Spanish crown set out to convert as many Native Americans as possible to Christianity. From 1769 to 1823, 21 missions were established along the California coast intended to convert and civilize the California indigenous population. Expeditions of California's Central Valley were limited to the retrieval of neophytes. Only five documented expeditions reported to have seen the Sacramento delta before 1800. Spanish explorer Gabriel Moraga first explored the Sacramento region and named the area sometime before 1808 (Hoover et al. 2002).

When Mexico gained independence from Spain in 1821, the Mexican government gained control of California and began secularizing the missions by 1834. Mission lands were meted out in the form of ranchos as rewards to political supporters and/or prestigious Mexican citizens, or *Californios*. Following the Mexican-American War and as part of the Treaty of Guadalupe Hidalgo, Mexico ceded Upper California and New Mexico to the United States. As part of the Treaty, many previously instated land grants were honored by the U.S. government. In 1848, the discovery of gold on the South Fork of the American River in Coloma caused an influx of settlers into California. Early pioneers passed through the area on their way east into the foothill mining camps. Placer County was established in 1851 from parts of Sutter and Yuba counties three years after the discovery of gold in California (Marschner 2000:219). Placer mining was the principal method of mining for gold in the county, and this Spanish term was given to the new county.

Penryn was named by Griffith Griffith, who opened a granite quarry in the area and constructed the Penryn Granite Works office in 1864, the same year the Central Pacific Railroad was constructed through the area. Griffith named the town after Penrhyn, Wales. Griffith's quarry grew to include polishing mills and other improvements and by 1872 employed around 200 workers. The quarry became a major producer of granite during this time, supplying stone for some of California's early historic buildings - including the State Capitol, the county courthouse in Stockton, and the United States Mint in San Francisco (Lardner and Brock 1924:198).

The fruit industry did not fully take off in Penryn as it did in the Sacramento Valley until 1886, when the Penryn Fruit Company was incorporated. The company sent mainly peaches, plums, cherries, and pears to eastern markets (Lardner and Brock 1924:199). The flumes and ditches built for transporting water for mining purposes changed the technological implications of water as a natural resource in the region. As the gold supply dissipated, many miners turned to farming as an economic pursuit (California Department of Water Resources 2016). In 1890, the Citrus Colony in Penryn was organized, and colonists from England were sold portions of land to tend upon arrival. These fruit

colonies did not last long, however, due to the Panic of 1893, which financially affected the fruit industry and led colonists to seek work in other fields (Lardner and Brock 1924:200).

5.0 STUDY METHODS AND RESULTS

5.1 RECORDS SEARCH

On July 2, 2020, LSA submitted a request for a records search (PLA-20-76) of the preliminary Study Area and a 0.25-mile radius by staff at the North Central Information Center (NCIC). The NCIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Placer County. The records search included a review of the following federal and state inventories:

- California Inventory of Historic Resources (California Department of Parks and Recreation 1976);
- Five Views: An Ethnic Historic Site Survey for California (California Office of Historic Preservation 1988);
- California Points of Historical Interest (California Office of Historic Preservation 1992);
- California Historical Landmarks (California Office of Historic Preservation 1996);
- Archaeological Determinations of Eligibility (California Office of Historic Preservation 2012); and
- Built Environment Resources Directory (BERD) (California Office of Historic Preservation 2020)

The records search identified 49 resources within 0.25 miles of the preliminary Study Area. Of the 49 resources, three are within the Project Site and are summarized in Table 1 below:

Table 1: Cultural Resources Identified within the Project Site by Records Search

Resource Number / Trinomial	Resource Summary	Location within Project Site and Potential Impacts
P-31-000964 / CA-PLA-000841H	Historic-period resource consisting of the original Central Pacific Transcontinental Railroad (later the Southern Pacific Railroad, and currently the Union Pacific) which has been designated a State Historic Landmark No. 780 (Melvin and Freeman 2007).	Southern portion of Project Site, along the south side of Callison Road. The proposed project is within the railroad ROW but will not impact this resource as improvements to Callison Road will focus on tie-in to development north of the rail road alignment.
P-31-000967 / CA-PLA-000844H	Historic-period resource consisting of the Antelope Canal, an earthen structure constructed in 1852 averaging approximately three meters wide and lined with gunnite. It is currently managed by the PCWA (Windmiller 2003, Toffelmier 2005a). According to the BERD, this resource was found ineligible for listing in the NRHP in 2018.	Crosses the northeast corner of the Project Site and is proposed to supply water to the Project. The Project will coordinate with PCWA for access to water. Not a historical resource under CEQA; therefore, no impact analysis necessary.
P-31-003277	Historic-period segment of Callison Road, which was evaluated and did not meet the criteria for listing under the NRHP or CRHR (Toffelmier 2005c).	Within the railroad ROW in the southern portion of the Project Site. The project plans to make roadway improvements to tie development

Table 1: Cultural Resources Identified within the Project Site by Records Search

Resource Number / Trinomial	Resource Summary	Location within Project Site and Potential Impacts
		into Callison Road. Not a historical resource under CEQA; therefore, no impact analysis necessary.

Source: Provided by the North Central Information Center (NCIC) as part of File No. PLA-20-76

One investigation has been conducted within the Project Site and an additional 10 have been conducted within 0.25 miles of the Project Site. Of these 10, three are directly adjacent to the Project Site. A summary of the one investigation within and three adjacent to the Project Site is presented in Table 2 below:

Table 2: Investigations Identified within or adjacent to the Project Site by Records Search

Author (Date)	Report	Location within/adjacent to Project Site
Jones and Stokes Associates, Inc. (1999)	Cultural Resources Inventory Report for Williams Fiber Optic Cable System: Sacramento to CA/NV State Border (Report No. 2935)	A linear study adjacent to the Project Site within railroad ROW located along the alignment of the railroad near Callison Road.
Arrington et al. (2006)	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California (Report No. 8619)	A linear study adjacent to the Project Site within railroad ROW located along the alignment of the railroad near Callison Road.
Waechter, Wee, and Toffelmier (2007)	Cultural Resources Inventory for the Sacramento River Water Reliability Study, Sacramento and Placer Counties, California (Report No. 8967)	A linear study extending north-south through the Project Site .
Snyder (1997)	Central Pacific Transcontinental Railroad, Sacramento to Nevada State Line - HAER CA-196 (Report No. 10434)	A linear study adjacent to the Project Site within railroad ROW near Callison Road.

Source: Provided by the North Central Information Center (NCIC) as part of File No. PLA-20-76

5.2 LITERATURE AND MAP REVIEW

LSA conducted additional research to obtain archaeological, ethnographic, historical, and environmental information about the preliminary Study Area and surrounding area. The literature reviewed includes publications, maps, local historical directories, and websites for archaeological, ethnographic, historical, and environmental information about the Project Site and its vicinity. The literature review results informed the Project Setting section of this report, and the map review results are summarized in Table 3, below.

Table 3: Map Review Results

Year	Map Name	Results
1954 (1955 ed.)	7.5-minute USGS topographic quadrangle: *Rocklin, Calif*.	Current alignments of English Colony Way, Clark Tunnel Road, Allen Road, and Callison Road as well as the Southern Pacific Railroad are established. Most of the Project Site is depicted with an orchard.
1952	Aerial Imagery	This image shows the lower elevation areas with dense agriculture and the higher elevated areas (toward the north side of the Project Site) as undeveloped with open grassland and the northeast corner is moderately forested. Antelope Canal is established in its current alignment. All aforementioned roadways and are established as well as the railroad.
1954 (1961 ed.)	7.5-minute USGS topographic quadrangle: *Rocklin, Calif*.	Same as the 1955 edition.
1966	Aerial Imagery	This image is similar to 1952, but with reduced agriculture.
1967 (1968 ed.)	7.5-minute USGS topographic quadrangle: *Rocklin, Calif*.	Same as the 1966 edition. A woodland area is depicted on the far west side of the Project Site at APNs 031-220-061-000 and 032-124-080-000.
1967 (1981 ed.)	7.5-minute USGS topographic quadrangle: *Rocklin, Calif*.	The alignment of Allen Road is extended to current. The driveway as currently observed for the 7615 Callison Road property adjacent to the Project Site is established with two structures depicted immediately adjacent west of the driveway. Access road from the driveway is also depicted extending to the Antelope Canal alignment. The reservoir pond currently observed is also established by this time.
1993	Aerial Imagery	The residence on APN 032-124-080-000 is established by this time, as well as another similarly sized structure immediately east of the current residence with at least one small ancillary building and reservoir ponds. Agricultural activity is heavily reduced and many surrounding residences are established by this time. The current driveway from Callison Road is well established.
1998	Aerial Imagery	Same as 1993.
2002	Aerial Imagery	The ancillary building, which may have been associated with the residence within on APN 032-124-080-000, has been removed. Everything else is the same as observed within the 1993 imagery.
2005	Aerial Imagery	Same as 2002.
2009	Aerial Imagery	Same as 2005.
2010	Aerial Imagery	Same as 2009.

Table 3: Map Review Results

Year	Map Name	Results
2012	Aerial Imagery	Same as 2010.
2014	Aerial Imagery	Same as 2012.
2016	Aerial Imagery	Same as 2014.

Source: Aerial Imagery acquired from Historic Aerials by NETR Online.

5.3 ARCHAEOLOGICAL SENSITIVITY ANALYSIS

Assessing the potential for buried archaeological deposits in and adjacent to the Project Site requires an understanding of landform age and overlying soils. Fundamentally, there is an inverse relationship between landform age and the potential for buried archaeological deposits. Some landforms predate human occupation of the region (e.g., Pleistocene alluvial fan deposits) and, as such, archaeological deposits on these landforms, if present, would be located at or near the surface. In contrast, those landforms that were formed during the Holocene (circa 11,700 years ago to the present) have a potential for containing buried surfaces (paleosols) that would have been available for human habitation during prehistory. Paleosols associated with Holocene landforms, therefore, may contain buried archaeological deposits (Meyer and Rosenthal 2008).

Geologically, the Project Site is located on a pre-Pleistocene-aged (>1.9 million years) landform. There are three soil types identified within the Project Site for the Project including caperton-rock outcrop complex, caperton-andregg coarse sandy loam, and andregg coarse sandy loam. Caperton series soils are centrally located in the main portion of the proposed Project and composed of weathered granodiorite and quartz diorite which form shallow, excessively draining soil. They are typically associated with 2 to 50 percent slopes. Caperton-andregg coarse sandy loam is observed on the western portion of the proposed Project and is associated with 2 to 15 percent slopes. This soil is composed of 50 percent caperton and 30 percent andregg. Andregg soils also located to the east and north of the proposed Project are formed from weathered granodiorite and create moderately deep, well-drained soil (Natural Resources Conservation Service 2001 and 2003). The northern portion, associated with higher elevation, is extremely rocky and this soil type is particularly associated with 30 to 50 percent slopes. The eastern portion of the Project Site does not have the same rocky characteristics and is associated with 15 to 30 percent slopes. These soils presented above are consistent with the landform age from which they originate (Meyer and Rosenthal 2008).

The landform upon which the Project Site is situated pre-dates the known time period for human occupation in this area, approximately 12,000 years ago. Additionally, based on this information, archaeological site sensitivity would be greater closer to the surface and not as likely to be subsurface.

5.4 CONSULTATION

5.4.1 Native American Heritage Commission

On July 16, 2020, LSA sent an email describing the Project with maps depicting the preliminary Study Area to the NAHC requesting a review of their Sacred Lands File for any Native American cultural

resources that might be impacted by the Project. Also requested were the names of Native Americans who might have information or concerns about the project site (Appendix B).

Ms. Nancy Gonzalez-Lopez, Cultural Resources Analyst, responded via email on July 16, 2020, stating that a search of the Sacred Lands File had negative results for Native American cultural resources in the project site, but noted that "the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any project area." A copy of this correspondence as well as a list of representatives of geographically affiliated tribes is provided in Appendix B. It is assumed the County will consult with geographically affiliated tribal groups for purposes of this project pursuant to Assembly Bill 52.

5.4.2 Placer County Historical Society

On July 16, 2020, LSA sent an email describing the Project with maps depicting the preliminary Study Area to the Placer County Historical Society asking for any information or concerns they may have regarding the Project. No response has been received to date. A copy of this correspondence is provided in Appendix C.

5.5 FIELD SURVEY

LSA Archaeologist Mariko Falke conducted a pedestrian survey of the preliminary Study Area on July 14, 2020. Most of the area is previously disturbed from canal/drainage (Antelope Canal) installation, grading associated access roads, underground utilities, previous vegetation removal, and pastoral activities. The area is currently used for maintaining the Antelope Canal, cattle grazing, and beekeeping. A small area in the southeast corner of APN 031-220-061-000 was set aside for beekeeping. This area was surveyed from a distance; the ground surface was exposed and could easily be viewed. Near this bee keeping area, several charcoal bits were observed on the ground surface indicating a recent burn that has since been removed. Flattened areas did not appear natural, but were graded or filled with imported sand (not observed anywhere else on site). Overall visibility of the Project Site was approximately 85 percent, limited only by low growing grasses. The west side of APN 031-220-061-000 and 032-124-080-000 appears to have been disturbed from vegetation removal to clear invasive Himalayan blackberry via heavy machinery based on track vehicle impressions and/or burned based on charcoal presence. Large granite outcroppings were observed in groups throughout the property and were likely mechanically moved based upon scrapes identified on large boulders and track vehicle impressions. These outcroppings were inspected for cultural modification, but none were observed. Ground squirrel burrows were observed throughout the property and inspected for any subsurface soil changes that could indicate a buried cultural resources deposit. No soil changes were observed. Generally, soil consisted on 10 YR 4/3 brown silty loam throughout the property. Vegetation observed includes Valley oak, Interior oak, Pine, various native grasses, thistle, and Himalayan blackberry. A couple mature oaks were observed on the property that are likely over 100 years old, however most trees on site appear to be less than 50 years old based on trunk diameter. Three cultural resources were identified within the Project Site and consist of the three identified from the records search (see Table 1).

6.0 STUDY FINDINGS AND RECOMMENDATIONS

6.1 FINDINGS

This study identified two historic-period cultural resources in the Project Site and one immediately adjacent (Appendix D; Appendix A, Figure 3). Of the three resources identified, the two within the Project Site were previously evaluated and found not to be historically significant (Antelope Canal and Callison Road). The Central Pacific Transcontinental Railroad is a California historical landmark and therefore meets the definition of a historical resource under CEQA. Although a portion of the project is within railroad ROW and the railroad is adjacent to the Project Site, there is no potential for the project to impact this resource; no substantial changes to this railroad are proposed as part of the project, and work within the railroad ROW will be limited to improvements to Callison Road. The findings of this study conclude that the project will result in no significant impacts to historical resources. Further, based on an assessment of landform and soils present on site, the Project Site has a low sensitivity for encountering buried archaeological deposits.

6.2 RECOMMENDATIONS

6.2.1 Archaeological Resources

Although the potential for encountering previously unidentified buried cultural resources in the Project Site is low, it cannot be discounted. If deposits of precontact or historic-period archaeological materials are encountered during Project activities, all work within 50 feet of the discovery should be redirected and a qualified archaeologist should be contacted to assess the situation and make recommendations regarding the treatment of the discovery. Project personnel should not collect or move any archaeological materials or human remains and associated materials.

Archaeological cultural resources should be avoided by project activities. If such resources cannot be avoided, they should be evaluated for their California Register of Historical Resources eligibility, under the direction of a qualified professional archaeologist, to determine if they qualify as a historical resource under CEQA. If the deposit is not eligible, a determination should then be made as to whether it qualifies as a unique archaeological resource under CEQA. If the deposit is neither a historical, nor unique archaeological resource, avoidance is not necessary. If the deposit is eligible for the California Register of Historical Resources or is a unique archaeological resource, it will need to be avoided by Project actions that may result in impacts, or such impacts must be mitigated. Mitigation may consist of, but is not limited to, recording the resource; recovery and analysis of archaeological deposits; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the study, the archaeologist should prepare a report documenting the methods and results of the investigation, and provide recommendations for the treatment of the archaeological materials discovered. The report should be submitted to Placer County and to the NCIC.

Precontact materials can include flaked-stone tools (e.g., Projectile points, knives, and choppers) or obsidian, chert, basalt, or quartzite tool-making debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones,

and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Prehistoric sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse.

6.2.2 Human Remains

Although background research and field survey did not indicate presence of cultural resources or human remains, Native American skeletal remains could potentially be identified in the project site during construction. In the event of accidental discovery of human remains, the specific protocol outlined by Section 7050.5 of the Health and Safety Code should be followed. If the Coroner determines that the remains are not subject to his or her authority, and if the Coroner recognizes the remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she will contact the NAHC by telephone within 24 hours.

The NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The most likely descendent may make recommendations to the City or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in PRC §5097.98.

7.0 REFERENCES CITED

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Terhorst, B. and C. Gerike
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2005b Resource record for P-31-001268 on file with the North Central Information Center in Sacramento, California.

2005c Resource record for P-31-003277 on file with the North Central Information Center in Sacramento, California.

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APPENDIX A

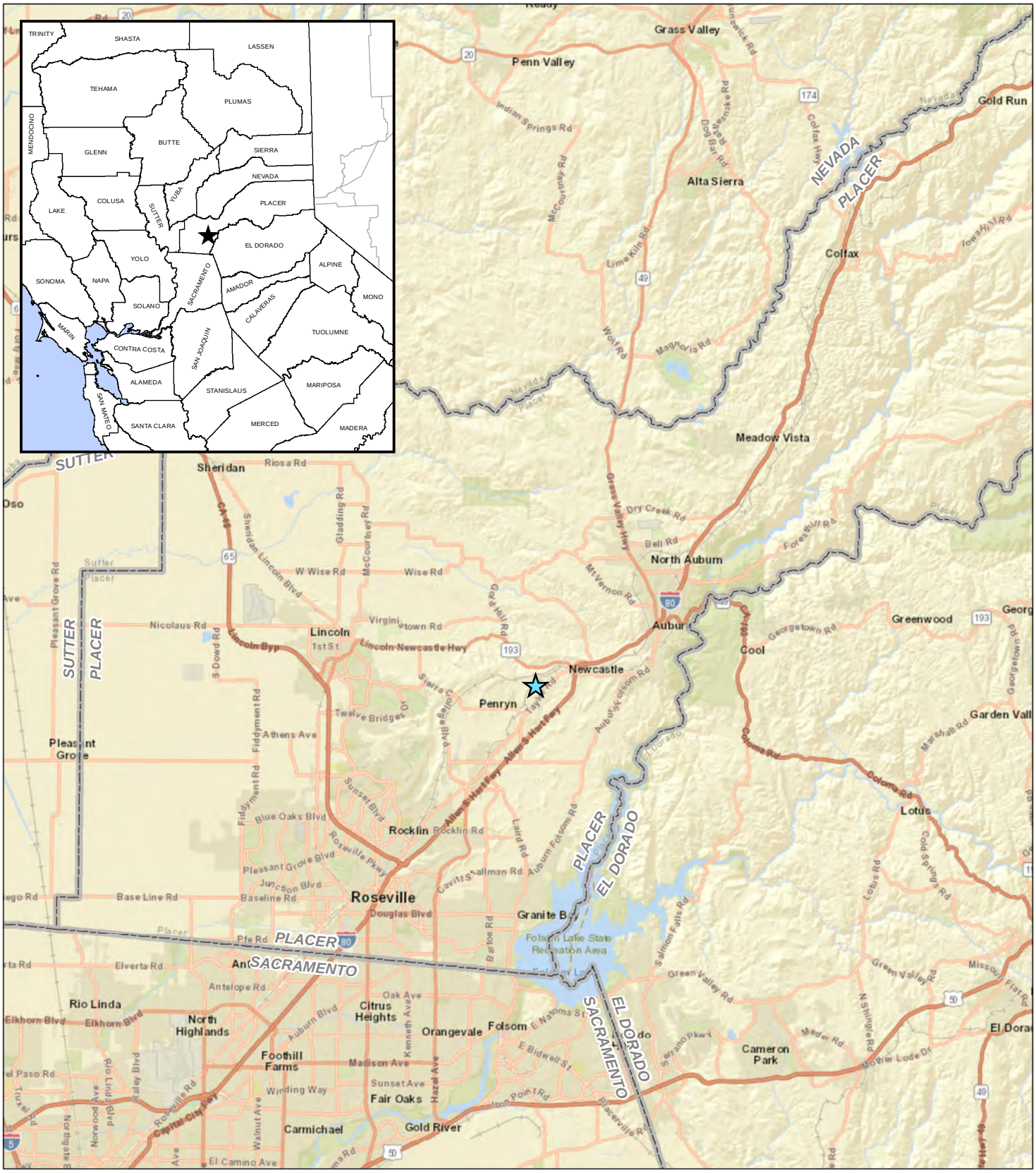
MAPS

Figure 1: Regional Location

Figure 2: Project Vicinity

Figure 3: Project Site

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LEGEND

Project Location

FIGURE 1

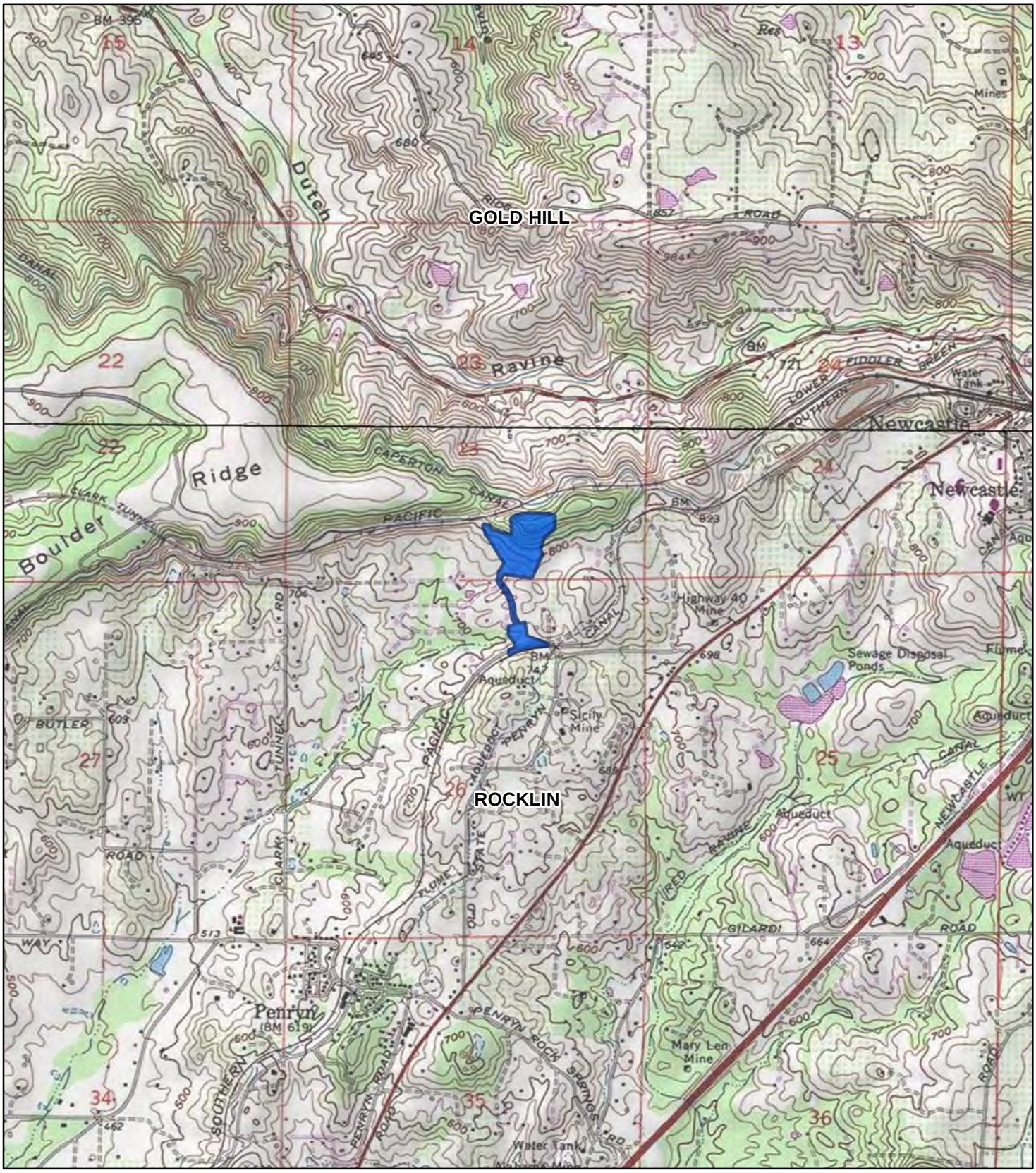
0 2.5 5
Miles

SOURCE: ESRI World Street Map (01/2020)

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7615 Callison Road Winery Project (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Regional Location



LSA

LEGEND

Project Site - (17.97 ac)

FIGURE 2

7615 Callison Road Winery Project (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Vicinity

0 1000 2000
FEET

SOURCE: USGS 7.5-minute topographic quadrangle of Rocklin, CA (1967, ed. 1981)

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LSA

LEGEND

- Project Site / Area of Direct Impact - (17.97 ac)
- Project Design
- Antelope Canal (P-31-000967)
- Callison Road (P-31-003277)
- Central Pacific Railroad (P-31-000964)

0 100 200
FEET

SOURCE: Vivid Maxar Aerial Imagery (11/2019): Mapping - BEM Inc. (3/2021)

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FIGURE 3

7615 Callison Road Winery Project (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Site / Area of Direct Impact

APPENDIX B

NATIVE AMERICAN HERITAGE COMMISSION CORRESPONDENCE

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NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

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

July 16, 2020

Mariko Falke

LSA Associates, Inc.

Via Email to: mariko.falke@lsa.net

Re: 7615 Callison Road Winery Project (BEM-08), Placer County

Dear Ms. Falke:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez

Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Placer County
7/16/2020

Shingle Springs Band of Miwok Indians
Regina Cuellar, Chairperson
P.O. Box 1340 Maidu
Shingle Springs, CA, 95682 Miwok
Phone: (530) 387 - 4970
Fax: (530) 387-8067
rcuellar@ssband.org

Tsi Akim Maidu
Grayson Coney, Cultural Director
P.O. Box 510 Maidu
Browns Valley, CA, 95918
Phone: (530) 383 - 7234
tsi-akim-maidu@att.net

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road Maidu
Auburn, CA, 95603 Miwok
Phone: (530) 883 - 2390
Fax: (530) 883-2380
bguth@auburnrancheria.com

Colfax-Todds Valley Consolidated Tribe
Clyde Prout, Chairperson
P.O. Box 4884 none Maidu
Auburn, CA, 95604 Miwok
Phone: (530) 577 - 3558
miwokmaidu@yahoo.com

Colfax-Todds Valley Consolidated Tribe
Pamela Cubbler, Treasurer
P.O. Box 4884 Maidu
Auburn, CA, 95604 Miwok
Phone: (530) 320 - 3943
pcubbler@colfaxrancheria.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 7615 Callison Road Winery Project (BEM-08), Placer County.

From:	Gonzalez-Lopez, Nancy@NAHC
To:	Mariko Falke
Subject:	7615 Callison Road Winery Project (BEM-08), Placer County
Date:	Thursday, July 16, 2020 12:01:52 PM
Attachments:	SLF No 7615CallisonRoad FalkePlacer 7-16-20 Signed.pdf 7615CallisonRoad FalkePlacer 7-16-20.pdf

---

Regards,

Nancy Gonzalez-Lopez
Cultural Resources Analyst
Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 573-0168

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 7615 Callison Road Winery Project (BEM-08)

County: Placer

USGS Quadrangle

Name: Rocklin, CA

Township: 12N Range: 7E Section(s): 23, 26, and 27

Company/Firm/Agency:

LSA Associates, Inc.

Contact Person: Mariko Falke

Street Address: 201 Creekside Ridge Court, Suite 250

City: Roseville Zip: 95678

Phone: (916) 844-2967 Extension: Office: (916) 772-7450 x5145

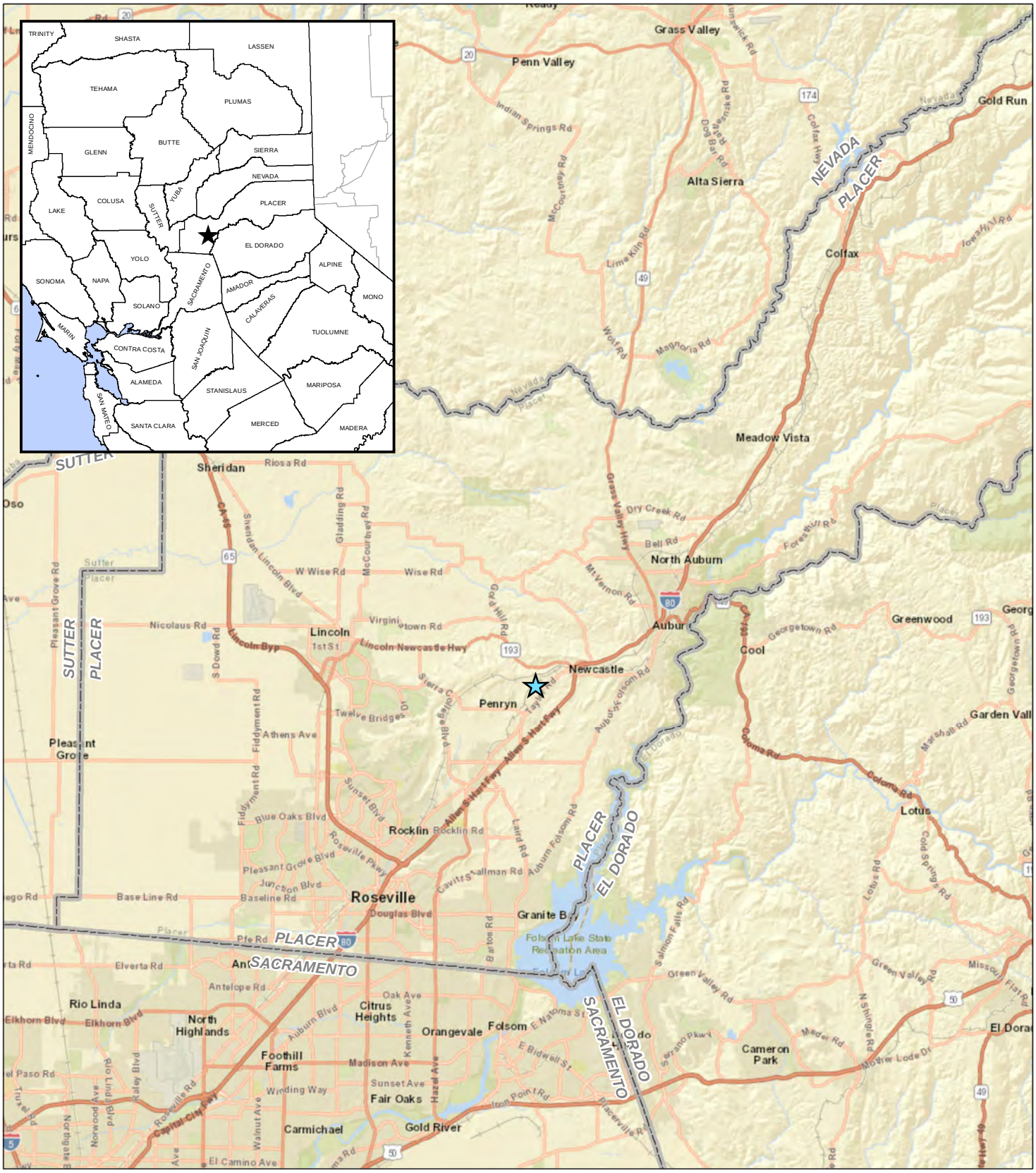
Fax:

Email: mariko.falke@lsa.net

Project Description:

The Project would include development of a winery including a vineyard and three structures. The study area, as delineated for purposes of the Cultural Resources Study, includes three parcels: Assessor Parcel Numbers 031-220-061-000, 032-124-080-000, and 032-124-044-000.

☑ Project Location Map is attached



LEGEND

Project Location

FIGURE 1

0 2.5 5

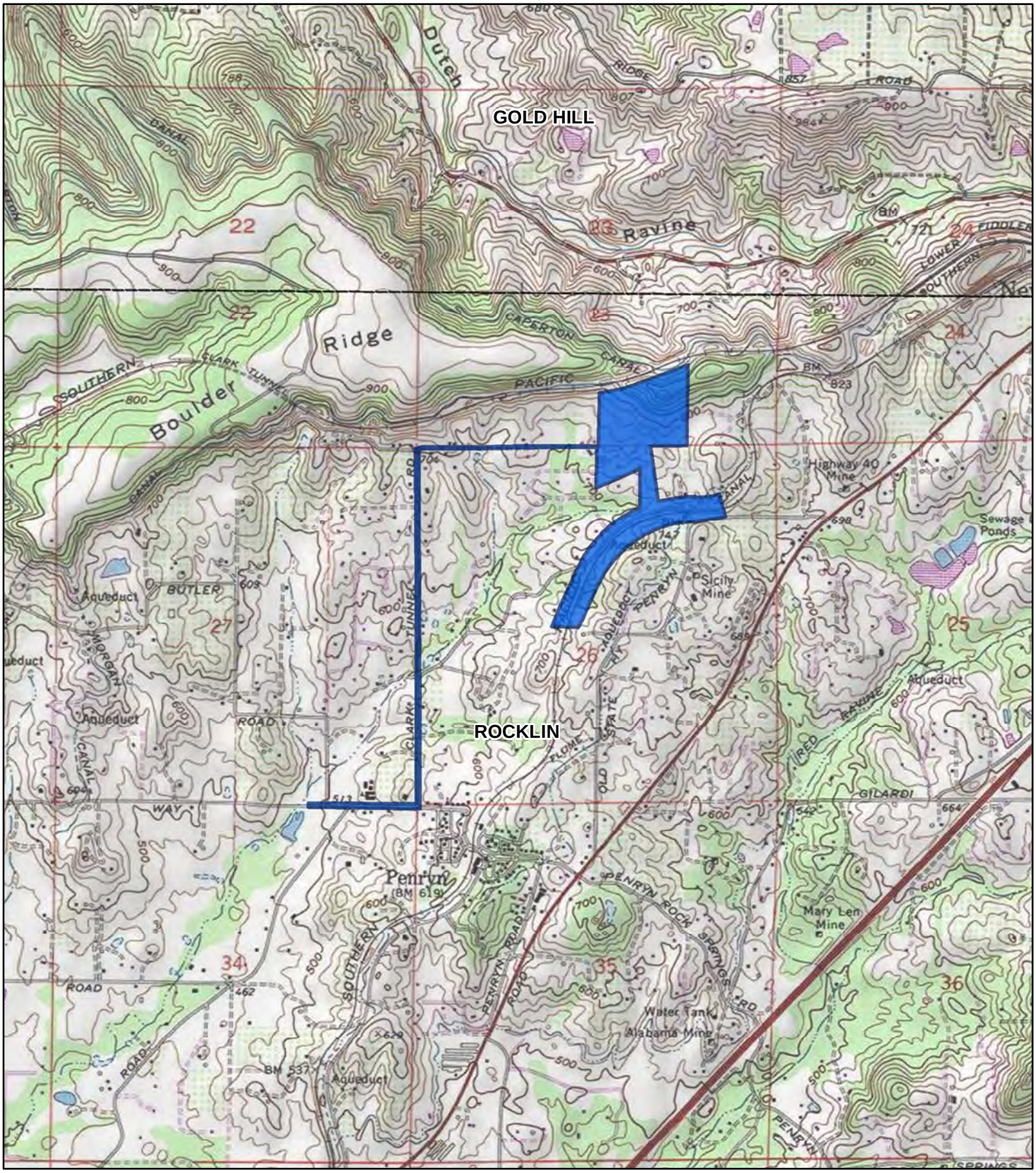
Miles

SOURCE: ESRI World Street Map (01/2020)

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Winery Project at 7615 Callison Road (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Regional Location



LSA

LEGEND

Study Area - (77.99 ac)

FIGURE 2

N

0 1000 2000

FEET

Winery Project at 7615 Callison Road (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Vicinity

SOURCE: USGS 7.5-minute topographic quadrangle of Rocklin, CA (1967, ed. 1981)

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APPENDIX C

HISTORICAL SOCIETY CONSULTATION

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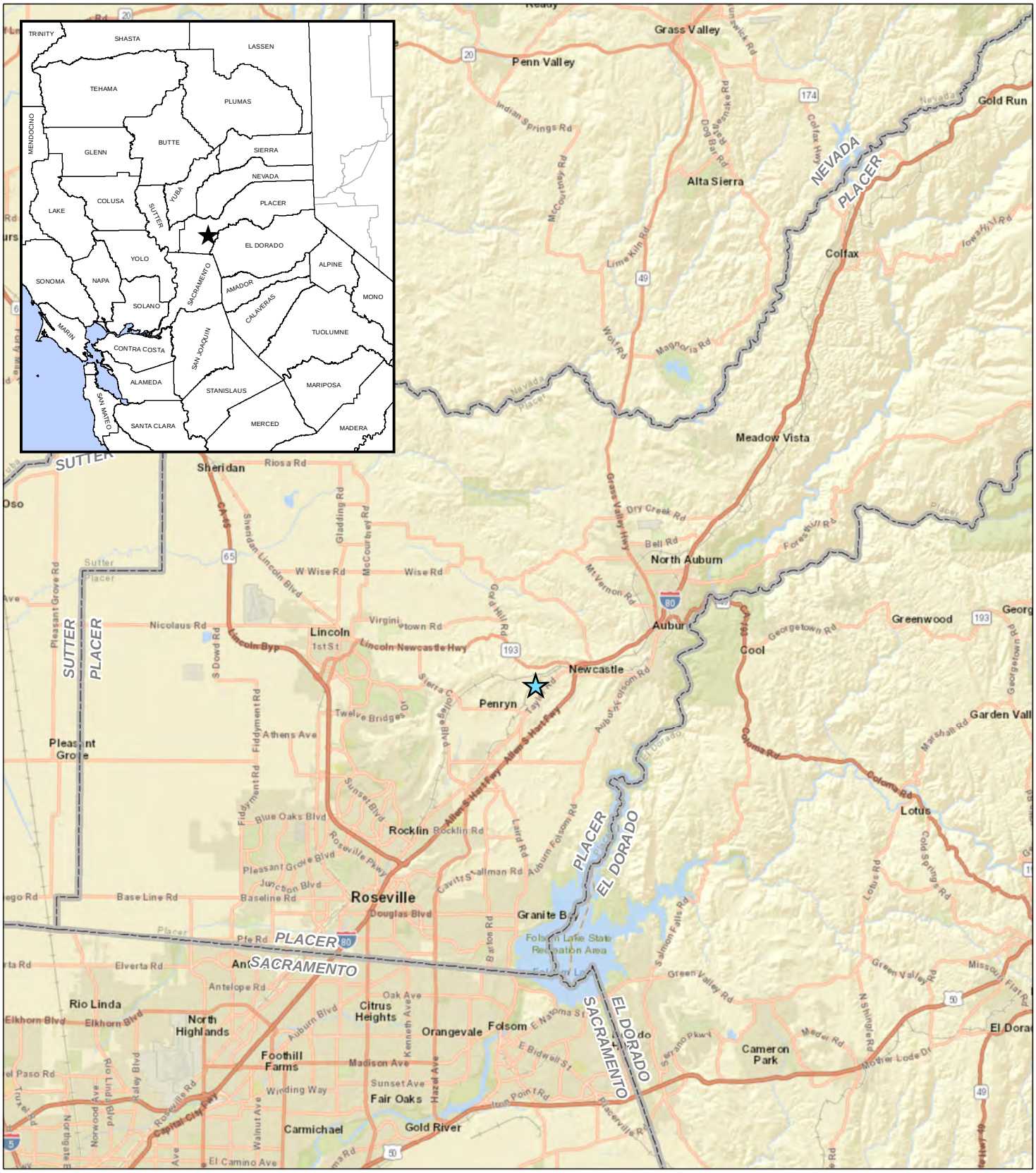
From: Mariko Falke
To: placerhistorical@gmail.com
Subject: 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2001)
Date: Thursday, July 16, 2020 8:57:00 AM
Attachments: image001.png
Maps.pdf

To the Placer Historical Society,
Building Engineering & Maintenance, Inc., (BEM) proposes the 7615 Callison Road Winery Project in Penryn, Placer County, California (Attachment: Maps). The Project would include development of a winery including a vineyard and three structures. The study area, as delineated for purposes of the Cultural Resources Study being conducted by LSA, includes three parcels: Assessor Parcel Numbers 031-220-061-000, 032-124-080-000, and 032-124-044-000, located in Township 12 North, Range 7 East, Sections 23 and 26 of the Mount Diablo Base Line and Meridian as depicted on the USGS 7.5-minute topographic quadrangle of Rocklin, CA (Attachment: Maps, Figure 2).

LSA is conducting a study to determine if the project might affect cultural resources. Please notify us if your organization has any information or concerns about historical sites in study area delineated for the Project. This is not a request for research; it is solely a request for public input for any concerns that the historical society may have. If you have any questions, please contact me at your earliest convenience.

Thank you and all the best,
Mariko Falke | Cultural Resources Manager
LSA | 201 Creekside Ridge Court, Suite 250
Roseville, CA 95678
– – – – – – – – – – –
916-772-7450 Main Office EXT. 5145
916-844-2967 Direct
Website

SACRAMENTO AREA SustainableBusiness



LEGEND

Project Location

FIGURE 1

0 2.5 5

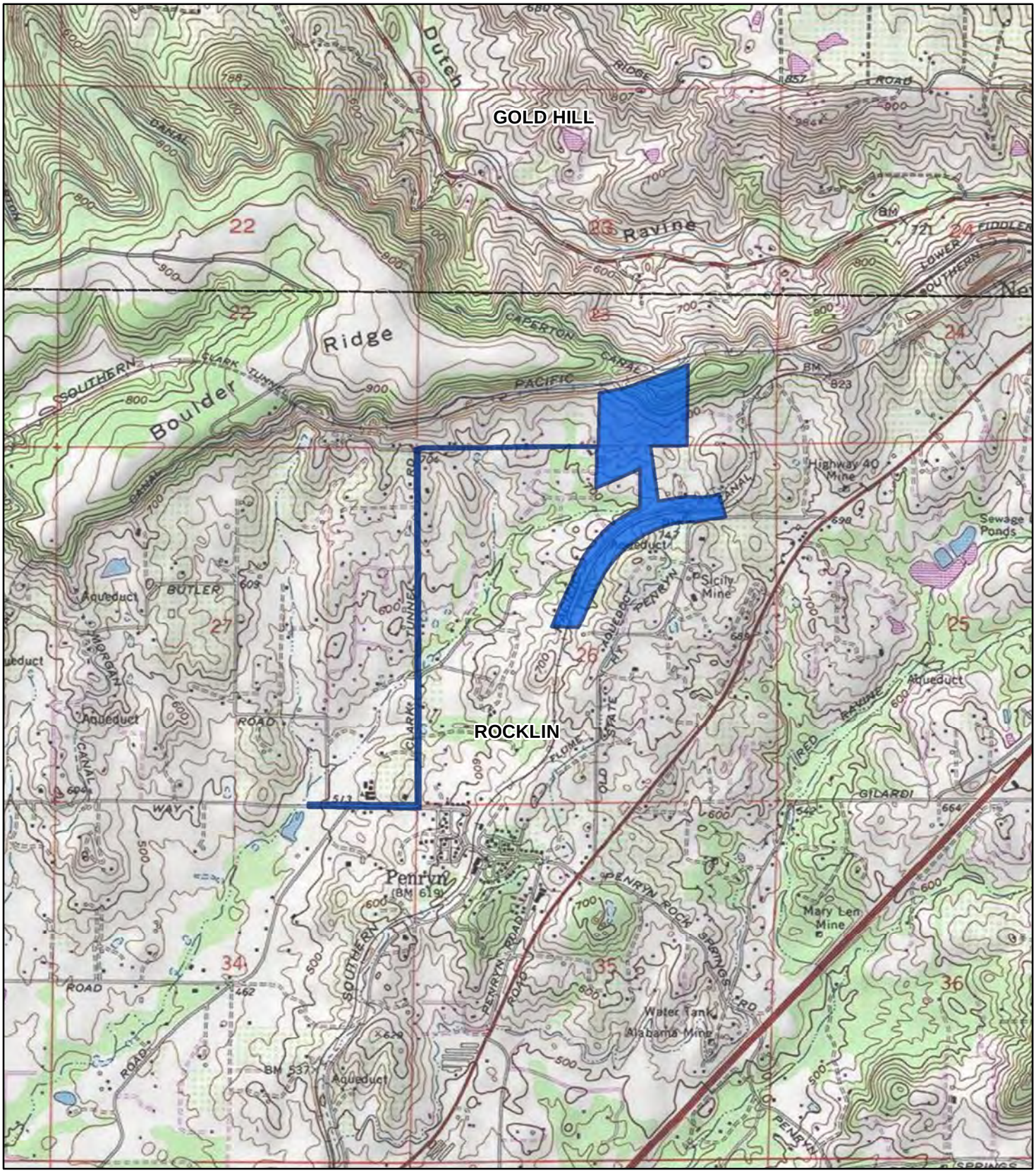
Miles

SOURCE: ESRI World Street Map (01/2020)

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Winery Project at 7615 Callison Road (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Regional Location



LSA

LEGEND

Study Area - (77.99 ac)

FIGURE 2

N

0 1000 2000

FEET

Winery Project at 7615 Callison Road (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Vicinity

SOURCE: USGS 7.5-minute topographic quadrangle of Rocklin, CA (1967, ed. 1981)

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APPENDIX H

GEOTECHNICAL ENGINEERING STUDY
FOR
PROJECT 8
7615 Callison Road
Penryn, Placer County, California

Project No. E22116.001
May 2022

YOUNGDAHL
ESTABLISHED 1984

YOUNGDAHL CONSULTING GROUP, INC.
ESTABLISHED 1984

1234 Glenhaven Court, El Dorado Hills, CA 95762
4300 Anthony Court, Unit D, Rocklin, CA 95677
ph 916.933.0633 fx 916.933.6482
www.youngdahl.net

Mima Capital LLC
4120 Douglas Boulevard, Suite 306-175
Granite Bay, California 95746

Project No. E22116.001
16 May 2022

Attention: Mr. Evan McKenzie

Subject: **PROJECT 8**
7615 Callison Road, Penryn, California 95663
GEOTECHNICAL ENGINEERING STUDY

References:
1. Proposal and Executed Contract for Project 8 prepared by Youngdahl Consulting Group, Inc., dated 14 February 2022(Proposal No. PE22-091).
2. Conceptual Grading Plans for Project 8, prepared by MacKay & Somps, Inc., dated 22 February 2021.
3. Project Description for Project 8, prepared by BEM, Inc., dated 21 October 2021
4. Geostructural Investigation- Preliminary Data Report- Wine Cave, for Project 8, dated 22 March 2022.
5. Refraction Seismic and Multichannel Analysis of Surface Waves Investigation for Project 8 Wine Cave Project, prepared by Gasch Geophysical Services, Inc., dated April 2022

Dear Mr. McKenzie:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has prepared this geotechnical engineering study for the project site located at 7615 Callison Road, Penryn, California. The purpose of this study was to prepare a project specific geotechnical report based on existing and new information that can be incorporated into design of the proposed site. To complete this task, our firm completed a subsurface exploration program, laboratory test program, and prepared this report in accordance with the Reference 1 proposal and contract.

Based upon our observations, the geotechnical aspects of the site appear to be suitable for support of the proposed structural improvements following grading and site improvement operations provided the recommendations presented in this report are incorporated into the design and construction. Geotechnical conditions associated with site development are anticipated to include improvement for drainage controls, cuts into native soils and rock, placement of engineered fills, foundation construction, and pavement improvements.

Due to the non-uniform nature of soils, other geotechnical issues may become more apparent during grading operations which are not listed above. The descriptions, findings, conclusions, and recommendations provided in this report are formulated as a whole; specific conclusions or recommendations should not be derived or used out of context. Please review the limitations and uniformity of conditions section of this report.

This report has been prepared for the exclusive use of the addressee of this report and their consultants, for specific application to this project, in accordance with generally accepted geotechnical engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,
Youngdahl Consulting Group, Inc.

Pavel Fomin
Staff Engineer

Reviewed by:

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GEOTECHNICAL ENGINEERING STUDY
FOR
PROJECT 8

1.0 INTRODUCTION

This report presents the results of our geotechnical engineering study performed for the proposed improvements planned to be constructed at 7615 Callison Road in Penryn, California. The vicinity map provided on Figure A-1, Appendix A shows the approximate project location.

Project Understanding

We understand that the project consists of development of a full-production winery, including wine production facilities, tasting room, accessory restaurant and associated facilities within three separate, contiguous parcels, which combined, total approximately 44 acres, located at 7615 Callison Road in Penryn, California.

The guard shack, located at the entrance to the site from Callison Road will consists of a 180 square foot building with a parking stall. The utility pad, located approximately 40 feet south of the Antelope Canal, near the eastern border of the site, will be cut into the hillside and surrounded by retaining walls. It will house the main electrical service, generator and other controls. The processing and warehouse building at the center of the site will cover approximately 23,500 square feet with a mezzanine and roof level. The processing/warehouse building area was previously cut into the hillside with an approximate observed height of 25 feet. It will be linked to the northern octagon building by a continuous meandering walkway. The octagon building sits atop the hill overlooking the vineyards below. It will contain a sub-level, 20 feet below grade, 8,000 square feet in plan dimension and is proposed to support the five upper levels, reaching an approximate height of 75 feet above ground. The proposed wine cave will be located in the hillside, beneath the octagon building with a maximum depth of 90 feet below grade. Access to the wine cave is achieved from the octagon building above by way of elevator shaft/stairwell and at grade level via two pedestrian access points, one of which will also serve as access for utility vehicles. A parking lot will be located adjacent of the octagon building on the north eastern side and support a minimum of 27 parking stalls. The buildings are anticipated to be supported on conventional shallow foundations and concrete slabs-on-grade. The area surrounding the buildings is anticipated to receive flatwork improvements, retaining walls, and parking areas. Anticipated cuts and fills range up to 25 feet for the buildings and surrounding improvements.

Background

A Phase I Environmental site assessment was carried out on the project site and determined the historical use was agricultural in the early 1950s and mid-1960s. A single family residence was constructed on the lower parcel in 1973 and in the time since, the site has been used as pastureland and more recently as vineyards in localized areas.

Based on a limited review of aerial photography, the majority of the site appears to have been undeveloped until minor grading operations were observed around 2016 to 2018, when cuts were made at the proposed Processing/Warehouse building. More grading operations were observed in 2021 surrounding the main access road leading from Callison Road, up to atop the hill.

If studies or plans pertaining to the site exist and are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

Purpose and Scope
Youngdahl Consulting Group, Inc. has prepared this report to provide geotechnical engineering recommendations and considerations for incorporation into the design and development of the site. The following scope of services were developed and performed for preparation of this report:

- A review of geotechnical and geologic data available to us at the time of our study;
- Performance of a field study consisting of a site reconnaissance and subsurface explorations to observe and characterize the subsurface conditions;
- Performance of a geophysics survey to characterize subsurface rippability and shear wave velocities;
- Laboratory testing on representative samples collected during our field study;
- Evaluation of the data and information obtained from our field study, laboratory testing, and literature review for geotechnical conditions;
- Development of the following geotechnical recommendations and considerations regarding earthwork construction including, site preparation and grading, engineered fill criteria, excavation characteristics, seasonal moisture conditions, slope configurations, underground improvements, and drainage;
- Development of geotechnical design criteria for code-based seismicity, foundations, retaining walls, and pavements;
- Preparation of this report summarizing our findings, conclusions, and recommendations regarding the above-described information.

2.0 SITE CONDITIONS
The following section describes our findings regarding the site conditions that we observed during our site reconnaissance and subsurface explorations.

Surface Observations
The 44± acre project site is located at 7615 Callison Road in Penryn, California. The area is generally bounded by rural lands. Callison Road is located to the south, and the Union Pacific and Antelope Canal railroad to the north. The terrain at the site consists of rolling hills surrounding a knoll in the northeastern portion of the site which slopes 3H:1V and flatter. The hills are covered with trees, seasonal grasses, and vineyards. The site has a concrete water channel running through the center of the project site, between the proposed warehouse and octagon building.

Subsurface Conditions
Our field study included a site reconnaissance by a representative of our firm and a subsurface exploration program. The exploration program included the excavation of 8 test pits to evaluate the near surface soils conditions. The approximate locations of the test pits are presented on Figure A-2, Appendix A.

Non-engineered FILL with a thickness of 4½ feet was observed at test pit TP-8, located at the entrance at Callison Road. Non-engineered or undocumented fill is not considered suitable for development.

The subsurface soils at the project site appear to be typical for the region and consist of a thin layer of soils overlying shallow granitic bedrock which has weathered to various degrees. The surface soils generally composed of a blend of silts and sands in a medium stiff/dense condition. The underlying bedrock is generally composed of quartz-diorite which ranged from completely to highly weathered. The test pits were able to be excavated to depths up to 9 feet without refusal.

Groundwater Conditions
Groundwater was not encountered during our explorations. Generally, subsurface water conditions vary in the foothill regions because of many factors such as, the proximity to bedrock, fractures in the bedrock, topographic elevations, and proximity to surface water. Some evidence of past repeated exposure to subsurface water may include black staining on fractures, clay deposits, and surface markings indicating previous seepage. Based on our experience in the area, at varying times of the year water may be perched on less weathered rock and/or present in the fractures and seams of the weathered rock found beneath the site.

3.0 GEOTECHNICAL SOIL CHARACTERISTICS

The geotechnical soil characteristics presented in this section of the report are based on information from previous studies and observations and testing of samples collected from subsurface soils.

Laboratory Testing
Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil underlying the site. The results of the tests performed for this project are presented in Appendix B. In summary, the following tests were performed for the preparation of this report:

Table 1: Laboratory Tests

Laboratory Test	Test Standard	Summary of Results	
Direct Shear	ASTM D3080	TP-8 @0-1’	Φ = 39.0°, c = 201 psf (90%RC)
Maximum Dry Density	ASTM D1557	TP-8 @0-1’	γmax = 133.0 pcf, ωopt = 8.0%
Resistance Value	ASTM CTM 301	TP-8 @0-1’	30
Corrosivity Suite	CA DOT Tests 417, 422 and 643	See Soil Corrosivity Section	

Soil Expansion Potential
Although not encountered in our test pits, intermittent or isolated pockets of expansive clay soils have been found in the region, typically on top of the weathered bedrock. In concentrated amounts, such clays could cause distress to concrete slab-on-grade floors and foundations if present in the upper 3 feet of the structural improvement areas. However, due to the cuts and fills associated with hillside grading activities it has been our experience that these materials, if encountered, can be sufficiently blended such that expansive soil mitigation measures may not be required. Depending on the proposed grading plans and cuts or fills in the areas where clay is encountered, some focused excavations of the clay may be required. In addition, if during the site preparation operations, the clay soils are determined to be soft and/or unstable under the weight of the construction equipment, they will require overexcavation as discussed in the recommendations section below. If necessary, recommendations can be made based on our observations at the time of construction should greater quantities of expansive soils be encountered at the project site which were not encountered during this study.

Soil Corrosivity
A corrosivity testing suite consisting of soil pH, resistivity, sulfate, and chloride content tests were performed on selected soil samples collected during our site exploration. We are not corrosion specialists and recommend that the results be evaluated by a qualified corrosion expert. The laboratory test results (provided by Sunland Analytical, Inc.) are provided in Appendix B and are summarized in Table 2, below.

Table 2: Corrosivity Summary

Location	Depth (ft)	Soil pH	Minimum Resistivity ohm-cm (x1000)	Chloride (ppm)	Sulfate (ppm)	Caltrans Environment	ACI Environment
TP-7	0-2	5.27	5.90	1.8	2.1	Corrosive	S0 (Not a Concern)

According to Caltrans Corrosion Guidelines Version 3.2, May 2021, the test results appear to indicate a corrosive environment due to having a pH lower than 5.5. According to the 2019 California Building Code Section 1904.1 and ACI 318-14 Table 19.3.1.1, the test results indicate the onsite soils have a negligible potential for sulfide attack of concrete. A certified corrosion engineer should be consulted to review the above tests and site conditions in order to develop specific mitigation recommendations if metallic pipes or structural elements are designed to be in contact with or buried in soil.

Geophysical Survey

Gasch Geophysical Services, Inc. (GGSI) competed a refraction seismic (RS) investigation and a multichannel analysis of surface waves (MASW) of the sub-surface materials at the Project 8 project site (Reference 5). The purpose of this investigation was to determine the seismic primary wave (P-wave) for rock competency and/or excavatability and shear wave (S-wave) velocity values for rock strength and/or stiffness. The sections below summarize the findings of said report; the full report is attached as Appendix D.

Refraction Seismic Analysis

The RS method measures the velocity at which a seismic wave propagates though a soil or rock medium. The results of the refraction seismic investigation revealed a high degree of variation in the calculated seismic velocities of the subsurface materials.

Low velocity material was encountered in the near surface on both RS lines, which suggests native soil, or highly weathered and/or decomposed rock grading to moderately weathered rock. Moderately-high to very high velocities were also measured on each line with velocities of ~7,000 feet/second (ft/s) and greater at depths ranging from 90 to 160 feet below surface grade (bsg). GGSI has experienced a limiting (refusal) velocity for large excavators to range from 3,500 ft/s to 4,500 ft/s, and a standard backhoe may meet refusal at seismic velocities as low as 2,000 ft/s.

Multichannel Analysis of Surface Waves

The MASW shear wave method provides, two-dimensional shear-wave velocities to depths of over 100 feet bsg. The results of the MASW revealed a wide range of velocities from the surface to 80 to 110 feet bsg, suggesting rock with varying degrees of weathering and fracturing.

The MASW line was aligned above the proposed entry tunnel. Low to moderate shear velocities (velocities of 900 ft/s to 1,900 ft/s) measured beneath this line at a moderate rate extending from ground surface to approximately 80 feet bsg on the south-southwest end of the line to over 110 feet bsg on the north-northeast end of the line.

4.0 GEOLOGY AND SEISMICITY

The geologic portion of this report includes a review of geologic data pertinent to the site based on an interpretation of our observations of the surface exposures and our observations in our explorations.

Geologic Conditions
According to the Pre-Cenozoic geology of the south half of the Auburn 15-minute quadrangle, California (USGS Bulletin 1341), the subject property and vicinity are underlain by the Penryn Pluton mapped as (KJpd). This is composed of quartz diorite in a medium-colored phase.

Naturally Occurring Asbestos
Asbestos is classified by the EPA as a known human carcinogen. Naturally occurring asbestos (NOA) has been identified as a potential health hazard. The California Geological Survey published a map in 2008 (Special Report 190) that qualitatively indicates the likelihood for NOA in Placer County. This project has been identified as being in an area least likely to contain NOA; therefore, we do not anticipate that special considerations will be required during of following grading operations.

Seismicity
Our evaluation of seismicity for the project site included reviewing existing fault maps and obtaining seismic design parameters from the USGS online calculators and databases. For the purpose of this study, we used a latitude and longitude of 38.870082, -121.160615 to identify the project site.

Alquist-Priolo Regulatory Faults
Based upon the records currently available from the California Department of Conservation, the project site is not located within an Alquist-Priolo Regulatory Review Zone and there are no known faults located at the subject site. We do not anticipate special design or construction requirements for faulting at this project site.

Code Based Seismic Criteria
Based upon the subsurface conditions encountered during our study, our experience in the area, and the geophysics survey data, the site may be classified as Site Class C. This is consistent with the map “A next-generation Vs30 Map for California based on geology and topography” (Wills, Gutierrez, et al 2015) developed for the California Geological Survey.

The seismic design parameters based subject latitude and longitude, the associated site class, and the USGS Seismic Design Web Service are provided in the following table. The use of more stringent design parameters is the purview of the structural engineer.

Table 3: Seismic Design Parameters*

Reference		Seismic Parameter	Recommended Value
ASCE 7-16	Table 20.3-1	Site Class	C
	Figure 22-7	Maximum Considered Earthquake Geometric Mean (MCE_G) PGA	0.194g
	Table 11.8-1	Site Coefficient F_{PGA}	1.206
	Equation 11.8-1	$PGA_M = F_{PGA}$ PGA	0.234g
2019 CBC	Figure 1613.2.1(1)	Short-Period MCE at 0.2s, S_S	0.454g
	Figure 1613.2.1(2)	1.0s Period MCE, S_1	0.223g
	Table 1613.2.3(1)	Site Coefficient, F_a	1.300
	Table 1613.2.3(2)	Site Coefficient, F_v	1.500
	Equation 16-36	Adjusted MCE Spectral Response Parameters, $S_{MS} = F_aS_s$	0.590g
	Equation 16-37	Adjusted MCE Spectral Response Parameters, $S_{M1} = F_vS_1$	0.334g
	Equation 16-38	Design Spectral Acceleration Parameters, $S_{DS} = ⅔S_{MS}$	0.393g
	Equation 16-39	Design Spectral Acceleration Parameters, $S_{D1} = ⅔S_{M1}$	0.223g
	Section 1613.2.5(1)	Seismic Design Category (Short Period), Occupancy I to III	C
	Section 1613.2.5(1)	Seismic Design Category (1-Sec Period), Occupancy I to III	D

*Based on the online calculator available at https://earthquake.usgs.gov/ws/designmaps/

Earthquake Induced Liquefaction, Settlement, and Surface Rupture Potential

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading.

Due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area and the relatively shallow depth to bedrock, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered nil. For the above-mentioned reasons mitigation for these potential hazards is not considered necessary for the development of this project.

Static and Seismically Induced Slope Instability

The existing slopes on the project site were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and no apparent tension cracks or slump blocks in the slope face or at the head of the slope. No other indications of slope instability such as seeps or springs were observed. Additionally, due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to rock, the potential for seismically induced slope instability for the existing slopes is considered low.

5.0 DISCUSSION AND CONCLUSIONS

Based upon the results of our field explorations, findings, and analysis described above, it is our opinion that construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained in this report are incorporated into the design plans, specifications, and implemented during construction. The on-site soils, once processed and compacted as recommended below, may be considered “engineered” and suitable for support of the planned improvements.

Geotechnical Considerations for Development

The project site is generally comprised of a thin layer of soils over shallow rock which is

considered suitable for support of the proposed improvements. Generally, issues associated with development on similar sites are associated with the excavation of shallow rock and the presence of seepage at the soil to rock contact. Project sites with similar conditions, are generally developed by addressing existing drainage features through the installation of a canyon drain followed by mass grading operations to construct a suitable building pad. Based on the results of the Reference 5 document (included in Appendix D), wide spread blasting operations are not anticipated to be required achieve the target mass grading configuration presented in the Reference 2 plans. Blasting cannot be precluded for wine cave development.

Additionally, buildings spanning across transition lines (e.g. rock to soil, or native soils to engineered fills) may be more prone to differential settlements compared to sites built on relatively flat lots. We anticipate that the proposed buildings may be supported by native soils or rock and engineered fills on the order of 25 feet. For these conditions, we have included the comments below. The geotechnical recommendations for this project are presented in the following sections.

- This report includes a recommendation for compaction of engineered fills to 95 percent and a minimum of 18 inches of embedment for foundations to reduce the potential for differential settlement.
- Improvements constructed below slopes may be more subject to seepage and poor drainage. Special attention should be given to configuring the landscaping to drain away from the foundation and how underground utilities are configured to prevent water migrating through the trench becoming impounded against the foundation. The installation of a subdrain along the building is anticipated to provide increased protection against unwanted water conditions.
- **We recommend removing all existing fill and placing as engineering fill with proper keyways and benches with a maximum gradient of 2H:1V.**

6.0 SITE GRADING AND EARTHWORK IMPROVEMENTS

Soil Moisture Considerations

The compaction of soil to a desired relative compaction is dependent on conditioning the soil to a target range of moisture content. Moisture contents that are excessively dry or wet could limit the ability of the contractor to compact soils to the requirements for engineered fill. When dry, moisture should be added to the soil and the soils blended to improve consistency. Wet soil will need to be dried to become compactable. Generally, this includes blending and working the soil to avoid trapping moisture below a dryer surficial crust. Other options are available to reduce the time involved but typically have higher costs and require more evaluation prior to implementation.

The largest contributor to excessive soil moisture is generally precipitation and seepage during the rainy season. In recognition of this, we suggest that consideration be given to the seasonal limitations and costs of winter grading operations on the site. Special attention should be given regarding the drainage of the project site. If the project is expected to work through the wet season, the contractor should install appropriate temporary drainage systems at the construction site and should minimize traffic over exposed subgrades due to the moisture-sensitive nature of the on-site soils. During wet weather operations, the soil should be graded to drain and should be sealed by rubber tire rolling to minimize water infiltration.

Excavation Characteristics

The uppermost site soils are anticipated to be excavatable with conventional earthwork equipment, such as a backhoe or mini-excavator. Excavations may become increasingly difficult below depths of 15 to 20 feet due to the underlying rock condition and can limit production of

backhoes and smaller dozers. Sites with similar subsurface conditions generally resort to using mid-size excavators.

Based on the Refraction Seismic Investigation findings (Appendix D), blasting is not anticipated to be required to achieve the design grade elevations for the proposed structures. If hard rock cuts in fractured rock are proposed, the orientation and direction of ripping will likely play a large role in the rippability of the material.

Utility trenches will likely encounter highly weathered rock excavation conditions. Blasting to achieve utility line grades, especially in planned deep cut areas cannot be precluded. Water inflow into any excavation approaching the hard rock surface is likely to be experienced in all but the driest summer and fall months. Pre-ripping during mass grading may be beneficial and should be considered with the Geotechnical Engineer prior to, or during mass grading.

Site Preparation

Preparation of the project site should involve, site drainage controls, dust control, clearing and stripping, expansive clay mitigation, overexcavation and recompaction of loose/soft/saturated soils, and exposed grade compaction considerations. The following paragraphs state our geotechnical comments and recommendations concerning site preparation.

Our recommendations are based on limited windows into the subsurface and interpretations thereof; therefore, a representative of our firm should be present during site clearing operations to identify the location and depth of potential fills or loose soils, some of which may not have been found during our evaluation. We should also be present to observe removal of deleterious materials, and to identify any existing site conditions which may require mitigation or further recommendations prior to site development.

Site Drainage Controls

We recommend that initial site preparation involve intercepting and diverting any potential sources of surface or near-surface water within the construction zones. Because the selection of an appropriate drainage system will depend on the water quantity, season, weather conditions, construction sequence, and methods used by the contractor, final decisions regarding drainage systems are best made in the field at the time of construction. All drainage and/or water diversion performed for the site should be in accordance with the Clean Water Act and applicable Storm Water Pollution Prevention Plan.

Swales and natural hillside drainage proposed to receive engineered fill may require the installation of canyon style drains (similar to Figure C-1, Appendix C) to mitigate for potential subsurface waters. Close coordination between the design professionals for placement and discharge of canyon style drains should be performed. Based on the Reference 2 plans, some of these features appear to have been incorporated into the civil planning at this current stage.

Dust Control

Dust control provisions should be provided for as required by the local jurisdiction's grading ordinance (i.e. water truck or other adequate water supply during grading) and Airborne Toxic Control Measure (ATCM) requirements. Dust control is the purview of the grading contractor.

Clearing and Stripping of Organic Materials

Clearing and stripping operations should include the removal of all organic laden materials including trees, bushes, root balls, root systems, and any soft or loose soil generated by the removal operations. Short or mowed dry grasses may be pulverized and lost within fill materials

provided no concentrated pockets of organics result. It is the responsibility of the grading contractor to remove excess organics from the fill materials. **No more than 2 percent of organic material, by weight, should be allowed within the fill materials at any given location.** Preserved trees may require tree root protection which should be addressed on an individual basis by a qualified arborist.

Expansive Clay Mitigation

Potentially expansive clays, if encountered, should be mixed thoroughly with less expansive on-site materials (silts, sands, and gravels) and should not be present in concentration in pavement areas or within 5 feet of the building envelope, either vertically or laterally where grading is performed. Proper disposition of clays on site should be documented by a representative of Youngdahl Consulting Group, Inc. Any final determination of mitigation measures should be based on the conditions observed during grading.

Overexcavation and Recompaction of Loose/Soft/Saturated Soils

Following general site clearing, all loose/soft or saturated soils (native or existing non-engineered fills) within the development footprint should be overexcavated down to firm native materials or engineered fills then backfilled with engineered fill as detailed in the engineered fill section below. This includes the surface of the stockpile that was observed to have been harvested of rocks for rockery walls. Any depressions extending below final grade resulting from the removal of fill materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill.

Exposed Grade Compaction

Exposed soil grades following initial site preparation activities and overexcavation operations should be scarified to a minimum depth of 8 inches and compacted to the requirements for engineered fill. Generally, where bedrock conditions are exposed, no scarification should be necessary; however, these surfaces may be moisture conditioned and compacted to mitigate disturbance resulting from site preparation. Prior to placing fill, the exposed grades should be in a firm and unyielding state. Any localized zones of soft or pumping soils observed within the exposed grade should either be scarified and recompacted or be overexcavated and replaced with engineered fill as detailed in the engineered fill section below.

Engineered Fill Criteria

All materials placed as fills on the site should be placed as “Engineered Fill" which is observed, tested, and compacted as described in the following paragraphs.

Suitability of Onsite Materials

We expect that soil generated from excavations on the site, excluding deleterious material, may be used as engineered fill provided the material does not exceed the maximum size specifications listed below.

Rock fragments or boulders exceeding 24 inches in maximum dimension should not be placed within the upper five feet of site grades or utility corridors. The upper two feet of the site grades and within the zone of proposed underground facilities should consist of predominantly rocks and rock fragments less than 12 inches in maximum dimension. Boulders over 24 inches in maximum dimension should be placed within the deeper portions of fill embankments below a depth of 5 feet and a minimum of 5 feet from the finish slope face. The individual boulders should be spaced such that compaction of finer rock and soil materials between the boulders can be achieved with the equipment being used for compaction. Materials placed between the boulders should consist of predominantly soil and rock less than 12 inches in maximum dimension. The soil/rock mixture

should be thoroughly mixed and placed between the boulders so as to preclude nesting or the formation of voids. Should insufficient deep fill areas exist for oversize rock disposal, the contractor should either dispose of the excess materials to an offsite location or mechanically reduce the rocks to less than 12 inches.

Fill Placement and Compaction

Engineered fills should be placed in thin horizontal lifts not to exceed 8 inches in uncompacted thickness. If the contractor can achieve the recommended relative compaction using thicker lifts, the method may be judged acceptable based on field verification by a representative of our firm using standard density testing procedures. Lightweight compaction equipment may require thinner lifts to achieve the recommended relative compaction. Fills should have a maximum particle size of 8 inches unless approved by our firm.

Table 4: Recommended Relative Compaction

Fill Materials	Relative Compaction	Method
Engineered Fill	95 percent	ASTM D1557
Utility Trench Backfill*	95 percent	ASTM D1557
Subgrade	95 percent	ASTM D1557
Aggregate Baserock Grade	95 percent	ASTM D1557
Asphalt Concrete Pavement	92 to 96 percent	ASTM D2041 or CTM 309

* Unless otherwise noted by the governing agency.

Our firm should be requested for consultation, observation, and testing for the earthwork operations prior to the placement of any fills. Fill soil compaction should be evaluated by means of in-place density tests performed during fill placement so that adequacy of soil compaction efforts may be evaluated as earthwork progresses. If performed, method specification methods will likely include the excavation of test pits within the fill materials to observe and document that a uniform over-optimum moisture condition, and absence of large and/or concentrated voids has been achieved prior to additional fill placement.

Import Materials

The recommendations presented in this report are based on the assumption that the import materials will be similar to the materials present at the project site. High quality materials are preferred for import; however, these materials can be more dependent on source availability. Import material should be approved by our firm prior to transporting it to the project site.

Material for this project should consist of a material with the geotechnical characteristics presented below. If these requirements are not met, additional testing and evaluation may be necessary to determine the appropriate design parameters for foundations, pavement, and other improvements.

Table 5: Select Import Criteria

Behavior Property	Reference Document	Recommendation
Direct Shear Strength	ASTM D3080	≥ 34° when compacted
Plasticity Index	ASTM D4318	≤ 12
Expansion Index	ASTM D4829	≤ 20
Sieve Analysis	ASTM D1140	Not more than 30% Passing the No. 200 sieve Rocks ≤ 6 inches in diameter
Resistance Value	CTM 301	≥ 30

Slope Configuration and Grading

The project site is proposed to have cuts and fill with a maximum slope orientation of 2H:1V (Horizontal:Vertical). Generally, a cut slope orientation of 2H:1V is considered stable with the material types encountered on the site. Steeper slope grades may be feasible in areas of competent rock and should be evaluated by a geologist at the time of construction. A fill slope constructed at the same orientation is considered stable if compacted to the engineered fill recommendations as stated in the recommendations section of this report. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Placement of Fills on Slopes

Placement of fill material on natural slopes should be stabilized by means of keyways and benches. Where the slope of the original ground equals or exceeds 5H:1V, a keyway should be constructed at the base of the fill. The keyway should consist of a trench excavated to a depth of at least 2 feet into firm, competent materials. The keyway trench should be at least 10 feet wide or as designated by our firm based on the conditions at the time of construction. Benches should be cut into the original slope as the filling operation proceeds. Each bench should consist of a level surface excavated at least 6 feet horizontally into firm soils or 4 feet horizontally into rock. The rise between successive benches should not exceed 36 inches. The need for subdrainage should be evaluated at the time of construction. Refer to Figure C-1 in Appendix C for typical keyway and bench construction.

Slope Face Compaction

All slope fills should be laterally overbuilt and cut back such that the required compaction is achieved at the proposed finish slope face. As a less preferable alternative, the slope face could be track walked or compacted with a wheel. If this second alternative is used, additional slope maintenance may be necessary.

Slope Drainage

Surface drainage should not be allowed to flow uncontrolled over any slope face. Adequate surface drainage control should be designed by the project civil engineer in accordance with the latest applicable edition of the CBC. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Underground Improvements

Trench Excavation

Trenches or excavations in soil should be shored or sloped back in accordance with current Cal/OSHA regulations prior to persons entering them. Where clay rind in combination with moist conditions is encountered in fractured bedrock, the project engineering geologist should be consulted for appropriate mitigation measures. The potential use of a shield to protect workers

cannot be precluded. Refer to the Excavation Characteristics section of Site Grading and Improvements of this report for anticipated excavation conditions.

Backfill Materials

Backfill materials for utilities should conform to the requirements of the local jurisdiction. It should be realized that permeable backfill materials will likely carry water at some time in the future. When backfilling within structural footprints, compacted low permeability materials are recommended to be used a minimum of 5 feet beyond the structural footprint to minimize moisture intrusion. If a permeable material is used as backfill within this zone, subdrainage mitigation may be required.

In addition, if the structure is oriented below the roadway and associated utilities, grout cutoffs and/or plug and drains around all utility penetrations are useful to keep moisture out from underneath the structure.

Backfill Compaction

Backfill compaction should conform to the requirements of the local jurisdiction or to the recommendations of this report, whichever is greater. Where backfill compaction is not specified by the local jurisdiction, the backfill should be compacted to achieve the minimum relative compactions specified above.

Exposure to Water

The configuration of a trench increases the likelihood that the trench may be exposed to or retain water. The presence of water can adversely impact the performance of the trench by increasing the potential for the transmission of water to undesired outlets and settlement, even when compacted to the requirements of engineered fill. The contractor should consider these conditions when managing water during interim and post construction periods.

7.0 DESIGN RECOMMENDATIONS

The contents of this section include recommendations for foundations, pavements, and drainage.

Shallow Conventional Foundations

Shallow conventional foundation systems are considered suitable for construction of the planned improvements, provided that the site is prepared in accordance with the recommendations discussed in Section 6.0 of this report.

The provided values do not constitute a structural design of foundations which should be performed by the structural engineer. In addition to the provided recommendations, foundation design and construction should conform to applicable sections of the 2019 California Building Code.

Foundation Capacities

The foundation bearing and lateral capacities are presented in the table below. The allowable bearing capacity is for support of dead plus live loads based on the foundation configuration presented in this report. The allowable capacity may be increased by 1/3 for short-term wind and seismic loads. Lateral forces on structures may be resisted by passive pressure acting against the sides of shallow footings and/or friction between the foundation bearing material and the bottom of the footing. Section 1806.3 of the 2019 CBC allows for the combination of the friction factor and passive resistance value to lateral resistance. Consideration should be given to

ignoring passive resistance where soils could be disturbed later or within 6 feet horizontally of the slope face.

Table 6: Foundation Capacities

Soil Type	Design Condition	Design Value	Applied Factor of Safety
Engineered Fill or Firm Native Soil	Allowable Bearing Capacity	3,000psf	3.0
	Allowable Fiction Factor*	0.45	1.5
	Allowable Passive Resistance	300 psf/ft	1.5
Rock	Allowable Bearing Capacity	4,000 psf	3.0
	Allowable Fiction Factor	0.50	1.5
	Allowable Passive Resistance*	360 psf/ft	1.5
* Friction Factor is calculated as tan(ϕ)			

Foundation Configuration

Conventional shallow foundations should be a minimum of 12 inches wide and founded a minimum of 18 inches below the lowest adjacent soil grade for up to two stories. The footings should be increased to 12 inches wide and founded a minimum of 24 inches below the lowest adjacent soil grade for three- and four-story buildings. Isolated pad foundations should be a minimum of 24 inches in plan dimension.

Foundation reinforcement should be provided by the structural engineer. The reinforcement schedule should account for typical construction issues such as load consideration, concrete cracking, and the presence of isolated irregularities. At a minimum, we recommend that continuous footing foundations be reinforced with four No. 4 reinforcing bars, two located near the bottom of the footing and two near the top of the stem wall.

Foundation Settlement

For design purposes, a total settlement of less than 1 inch may anticipated with a differential settlement of 0.5 inches in 25 feet where foundations are bearing on like materials. The settlement criteria are based upon the assumption that foundations will be sized and loaded in accordance with the recommendations in this report.

Foundation Influence Line and Slope Setback

All footings should be founded below an imaginary 2H:1V plane projected up from the bottoms of adjacent footings and/or parallel utility trenches, or to a depth that achieves a minimum horizontal clearance of 6 feet from the outside toe of the footings to the slope face, whichever requires a deeper excavation.

Subgrade Conditions

Footings should never be cast atop soft, loose, organic, slough, debris, nor atop subgrades covered by ice or standing water. A representative of our firm should be retained to observe all subgrades during footing excavations and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.

Shallow Footing / Stemwall Backfill

All footing/stemwall backfill soil should be compacted to the criteria for engineered fill as recommended in Section 6.0 of this report.

Retaining Walls

Our design recommendations and comments regarding retaining walls for the project site are discussed below. *Retaining wall foundations should be designed in accordance with the Shallow Conventional Foundations section above.*

Retaining Wall Lateral Pressures

Based on our observations and testing, the retaining wall should be designed to resist lateral pressure exerted from a soil media having an equivalent fluid weight provided in the table below. The values presented below are not factored and are for conditions when firm native soil or engineered fill is used within the zone behind the wall defined as twice the height of the retaining wall. Additionally, the values do not account for the friction of the backfill on the retaining wall which may or may not be present depending on the wall materials and construction.

The lateral pressures presented in the table below include recommendations for earthquake loading which is required for structures to be designed in Seismic Design Categories D, E or F per Section 1803.5.12.1 of the 2019 California Building Code states. The lateral pressures presented have been calculated using the Mononobe-Okabe Method derived from Wood (1973) and modified by Whitman et al. (1991)). The values are intended to be used as the multiplier for uniformly distributed loads and the parameter "H" is the total height of the wall including the footing but excluding any key, if used.

Table 7: Retaining Wall Pressures

Wall Type	Wall Slope Configuration	Equivalent Fluid Weight (pcf)	Lateral Pressure Coefficient	Earthquake Loading (plf)	
Free Cantilever	Flat	37	0.27	$4H^2$	Applied 0.6H above the base of the wall
	2H:1V	54	0.39	$16H^2$	
Restrained*	Flat	58	0.43		

* Restrained conditions shall be defined as walls which are structurally connected to prevent flexible yielding, or rigid wall configurations (i.e. walls with numerous turning points) which prevent the yielding necessary to reduce the driving pressures from an at-rest state to an active state.

Generalized Design Values

Some software and design methods do not use the equivalent fluid weight method presented above; instead, they use design soil properties for a given soil condition such as the internal friction angle, cohesion, and bulk unit weight. Generally, this occurs for keyed or interlocking non-mortared walls such as segmental block (Basalite, Keystone, Allan Block, ect.) or rockery walls. When this occurs, the following soil parameters would be applicable for design with the onsite native materials in a firm condition or for engineered fills. The seismic coefficient is considered to be ½ of the adjusted peak ground acceleration for the site conditions is given in Section 4.0 of this report. Some software allows for the extension of the Mononobe-Okabe Method beyond the conventional limitations and, if the method is applied, could calculate seismic values significantly higher than those provided by the multiplier method provided above.

Table 8: Generalized Design Parameters

Internal Angle of Friction	Cohesion	Bulk Unit Weight	Seismic Coefficient, Kh
35°	0 psf	135 psf	0.117g

Wall Drainage

The criteria presented above is based on fully drained conditions as detailed in the attached Figure C-3, Appendix C. For these conditions, we recommend that a blanket of filter material be placed behind all proposed walls. The filter material should conform to Class 1, Type B permeable

material in combination with a filter fabric to separate the open graded gravel/rock from the surrounding soils. Generally, a clean ¾ inch crushed rock should be acceptable. Consistent with Caltrans Standards, when Class 2 permeable materials are used, the filter fabric may be omitted unless otherwise designed. Permeable materials are specified in Section 68 of the California Department of Transportation Standard Specifications, current edition.

The blanket of filter material should be a minimum of 12-inches thick and should extend from the bottom of the wall to within 12 inches of the ground surface. The top 12 inches of wall backfill should consist of a compacted soil cap. A filter fabric having specifications equal to or greater than those for Mirafi 140N should be placed between the gravel filter material and the surrounding soils to reduce the potential for infiltration of soil into the gravel. A 4-inch diameter drain pipe should be installed near the bottom of the filter blanket with perforations facing down. The drainpipe should be underlain by at least 4 inches of filter-type material. An adequate gradient should be provided along the top of the foundation to discharge water that collects behind the retaining wall to a controlled discharge system.

The configuration of a long retaining wall generally does not allow for a positive drainage gradient within the perforated drain pipe behind the wall since the wall footing is generally flat with no gradient for drainage. Where this condition is present, to maintain a positive drainage behind the walls, we recommend that the wall drains be provided with a discharge to an appropriate non-erosive outlet a maximum of 50 feet on center. **In addition, if the wall drain outlets are temporarily stubbed out in front of the walls for future connection during building construction, it is imperative that the outlets be routed into the tight pipe area drainage system and not buried and rendered ineffective.**

Slab-on-Grade Construction

It is our opinion that soil-supported slab-on-grade floors could be used for the main floor of the structures, contingent on proper subgrade preparation. Often the geotechnical issues regarding the use of slab-on-grade floors include proper soil support and subgrade preparation, proper transfer of loads through the slab underlayment materials to the subgrade soils, and the anticipated presence or absence of moisture at or above the subgrade level. We offer the following comments and recommendations concerning support of slab-on-grade floors. The slab design (concrete mix design, curing procedures, reinforcement, joint spacing, moisture protection, and underlayment materials) is the purview of the project Structural Engineer.

<u>Slab Subgrade Preparation</u>

All subgrades proposed to support slab-on-grade floors should be prepared and compacted to the requirements of engineered fill as discussed in Section 6.0 of this report.

<u>Slab Underlayment</u>

As a minimum for slab support conditions, the slab should be underlain by a minimum 4-inch thick crushed rock layer that is covered by a minimum 10-mil thick moisture retarding plastic membrane. The membrane may only be functional when it is above the vapor sources. The bottom of the crushed rock layer should be above the exterior grade to act as a capillary break and not a reservoir, unless it is provided with an underdrain system. The slab design and underlayment should be in accordance with ASTM E1643 and E1745.

An optional 1-inch blotter sand layer placed above the plastic membrane, is sometimes used to aid in curing of the concrete. Although historically common, this blotter layer is not currently included in slabs designed according to the 2019 Green Building Code. When omitted, special wet curing procedures will be necessary. If installed, the blotter layer can become a reservoir for

excessive moisture if inclement weather occurs prior to pouring the slab, excessive water collects in it from the concrete pour, or an external source of water enters above or bypasses the membrane.

Our experience has shown that vapor transmission through concrete is controlled through proper concrete mix design. As such, proper control of moisture vapor transmission should be considered in the design of the slab as provided by the project architect, structural or civil engineer. It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

Slab Thickness and Reinforcement

Geotechnical reports have historically provided minimums for slab thickness and reinforcement for general crack control. The concrete mix design and construction practices can additionally have a large impact on concrete crack control. All concrete should be anticipated to crack. As such, these minimums should not be considered to be standalone items to address crack control, but are suggested to be considered in the slab design methodology.

In order to help control the growth of cracks in interior concrete from becoming significant, we suggest the following minimums. Interior concrete slabs-on-grade not subject to heavy loads, should be a minimum of 4-inches thick and reinforced. A minimum of No. 3 deformed reinforcing bars placed at 24 inches on center both ways, at the center of the structural section is suggested. Joint spacing should be provided by the structural engineer. Troweled joints recovered with paste during finishing or “wet sawn” joints should be considered every 10 feet on center. Expansion joint felt should be provided to separate floating slabs from foundations and at least at every third joint. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Vertical Deflections

Soil-supported slab-on-grade floors can deflect downward when vertical loads are applied, due to elastic compression of the subgrade. For preliminary design of concrete floors, a modulus of subgrade reaction of k = 170 psi per inch would be applicable for engineered fills.

Exterior Flatwork

Exterior concrete flatwork is recommended to have a 4-inch thick rock cushion. This could consist of vibroplate compacted crushed rock or compacted ¾-inch aggregate baserock. If exterior flatwork concrete is against the floor slab edge without a moisture separator it may transfer moisture to the floor slab. Expansion joint felt should be provided to separate exterior flatwork from foundations and at least at every third joint. Contraction / groove joints should be provided to a depth of at least 1/4 of the slab thickness and at a spacing of less than 30 times the slab thickness for unreinforced flatwork, dividing the slab into nearly square sections. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Asphalt Concrete Pavement Design

We understand that asphalt pavements will be used for the associated roadways. The following comments and recommendations are given for pavement design and construction purposes. All

pavement construction and materials used should conform to applicable sections of the latest edition of the California Department of Transportation Standard Specifications.

Relative Compaction

The asphalt concrete pavement section should be constructed to achieve the minimum relative compactions specified in Section 6.0 of this report. Deviation from the following table should be reviewed by the governing agency when the pavements are to be constructed within their right-of-way. Final acceptance of the constructed pavement section is the purview of the governing agency or owner of the site.

Subgrade Stability

All subgrades and aggregate base should be proof-rolled with a full water truck or equivalent immediately before paving, in order to evaluate their condition.

Subgrade Resistance Value

Critical features that govern the durability of a pavement section include the stability of the subgrade; the presence or absence of moisture, free water, and organics; the fines content of the subgrade soils; the traffic volume; and the frequency of use by heavy vehicles. Soil conditions can be defined by a soil resistance value, or "R-Value," and traffic conditions can be defined by a Traffic Index (TI).

Laboratory testing was performed on a bulk sample considered to be representative of the materials expected to be exposed at subgrade. The tested soil had an R-Value of 30,an R-Value of 30 was used for the pavement sections in this report.

Design values provided are based upon properly drained subgrade conditions. Although the R-Value design to some degree accounts for wet soil conditions, proper surface and landscape drainage design is integral in performance of adjacent street sections with respect to stability and degradation of the asphalt. If clay soils are encountered and cannot be sufficiently blended with non-expansive soils, we should review pavement subgrades to determine the appropriateness of the provided sections, and provide additional pavement design recommendations as field conditions dictate. Even minor clay constituents will greatly reduce the design R-Value.

Due to the redistribution of materials that occurs during grading operations, we should review pavement subgrades to determine the appropriateness of the provided sections.

Section Thickness

The recommended design thicknesses presented in the following table were calculated in accordance with the methods presented in the Sixth Edition of the California Department of Transportation Highway Design Manual. A varying range of traffic indices are provided for use by the project Civil Engineer for roadway design.

Table 9: Asphalt Pavement Section Recommendations

Design Traffic Indices	Alternative Pavement Sections (Inches)	
	Asphalt Concrete *	Aggregate Base **
4.5	3.0	4.5
5.0	3.0	5.5
5.5	3.0	7.0
6.0	3.0 3.5	8.5 7.5
6.5	3.5 4.0	9.0 8.0
7.0	4.0 4.5	9.5 8.5
8.0	4.5 5.0	11.5 10.5
9.0	5.5 6.0	13.0 12.0
10.0	5.0 6.0 7.0	16.5 15.0 13.0

* Asphalt Concrete: must meet specifications for Caltrans Hot Mix Asphalt Concrete
** Aggregate Base: must meet specifications for Caltrans Class II Aggregate Base (R-Value = minimum 78)

Portland Cement Concrete Pavement Design

We understand that Portland cement concrete pavements may be considered for various aspects of the parking and drive access areas. The American Concrete Institute (ACI) Concrete Pavement Design method (ACI 330R-08) was used for design of the exterior concrete (rigid) pavements at the site.

Relative Compaction

The asphalt concrete pavement section should be constructed to achieve the minimum relative compactions specified in Section 6.0 of this report. Deviation from the following table should be reviewed by the governing agency when the pavements are to be constructed within their right-of-way. Final acceptance of the constructed pavement section is the purview of the governing agency.

Subgrade Stability

All subgrades and aggregate base should be proof-rolled with a full water truck or equivalent immediately before paving, in order to evaluate their condition.

Soil Design Parameters

The pavement thicknesses were evaluated based on the soil design parameters provided in the following table.

Table 10: Soil Parameters

Subgrade Soil Description	k, Modulus of Subgrade Reaction*	Base Course
Silty SAND	170 pci	6 inches

* Based on an R-Value of 30 as recommended above and correlated to a k-Value recommended by ACI 330R.

Section Thickness

Based on the subgrade soil parameters shown in the above table, the recommended concrete thicknesses for various traffic descriptions are presented in the table below. The recommended thicknesses provided below assume the use of plain (non-reinforced) concrete pavements.

Table 11: Concrete Pavement Section Recommendations

Category	ADTT*	Pavement Traffic Description	Thickness (inches)	
			3000 psi**	4000 psi**
A	1	Car parking areas and access lanes	4.5	4.5
A	10	Autos, pickups, and panel trucks only	5.0	5.0
B	25	Shopping center entrance and service lanes	6.0	5.5
B	300	Bus parking areas and interior lanes Single-unit truck parking areas and interior lanes	6.5	6.0
C	100	Roadway Entrances and Exterior Lanes	6.5	6.5
C	300		7.0	6.5
C	700		7.0	7.0

* Average Daily Truck Traffic
** 28-day concrete compressive strength

Jointing and Reinforcement

From a geotechnical perspective, contraction joints should be placed in accordance with the American Concrete Institute (ACI) recommendations which include providing a joint spacing about 30 times the slab thickness up to a maximum of 10 feet. The joint patterns should also divide the slab into nearly square panels. If increased joint spacing is desired, reinforcing steel should be installed within the pavement in accordance with ACI recommendations. Final determination of steel reinforcement configurations (if used within the pavements) remains the purview of the Project Structural Engineer.

Drainage

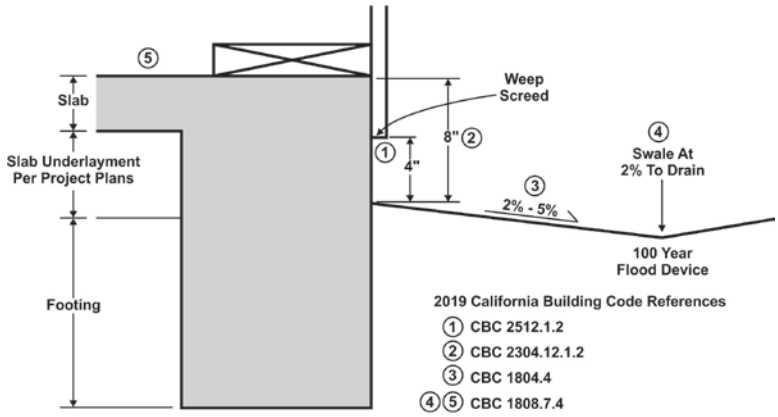
In order to maintain the engineering strength characteristics of the soil presented for use in this report, maintenance of the site will need to be performed. This maintenance generally includes, but is not limited to, proper drainage and control of surface and subsurface water which could affect structural support and fill integrity. A difficulty exists in determining which areas are prone to the negative impacts resulting from high moisture conditions due to the diverse nature of potential sources of water; some of which are outlined in the paragraph below. We suggest that measures be installed to minimize exposure to the adverse effects of moisture, but this will not guarantee that excessive moisture conditions will not affect the structure.

Some of the diverse sources of moisture could include water from landscape irrigation, annual rainfall, offsite construction activities, runoff from impermeable surfaces, collected and channeled water, and water perched in the subsurface soils on the bedrock horizon or present in fractures in the weathered bedrock. Some of these sources can be controlled through drainage features installed either by the owner or contractor. Others may not become evident until they, or the effects of the presence of excessive moisture, are visually observed on the property.

Some measures that can be employed to minimize the buildup of moisture include, but are not limited to proper backfill materials and compaction of utility trenches; grout plugs at foundation penetrations; collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); installation of subdrain/cut-off drain provisions; utilization of low flow irrigation systems; proper design and maintenance of landscaping and drainage facilities.

Drainage Adjacent to Buildings

All grades should provide rapid removal of surface water runoff; ponding water should not be allowed on building pads or adjacent to foundations or other structural improvements (during and following construction). All soils placed against foundations during finish grading should be compacted to minimize water infiltration. Finish and landscape grading should include positive drainage away from all foundations. Section 1808.7.4 of the 2019 California Building Code (CBC) states that for graded soil sites, the top of any exterior foundation shall extend above the elevation of the street gutter at the point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent. If overland flow is not achieved adjacent to buildings, the drainage device should be designed to accept flows from a 100-year event. Grades directly adjacent to foundations should be no closer than 8 inches from the top of the slab (CBC 2304.12.1.2), and weep screeds are to be placed a minimum of 4 inches clear of soil grades and 2 inches clear of concrete or other hard surfacing (CBC 2512.1.2). From this point, surface grades should slope a minimum of 2 percent away from all foundations for at least 5 feet but preferably 10 feet, and then 2 percent along a drainage swale to the outlet (CBC 1804.4). Downspouts should be tight piped via an area drain network and discharged to an appropriate non-erosive outlet away from all foundations.



Typical 2019 California Building Code Drainage Requirements

The above referenced elements pertaining to drainage of the proposed structures is provided as general acknowledgement of the California Building Code requirements, restated and graphically illustrated for ease of understanding. Surface drainage design is the purview of the Project Architect/Civil Engineer. Review of drainage design and implementation adjacent to the building envelopes is recommended as performance of these improvements is crucial to the performance of the foundation and construction of rigid improvements.

It should be noted that due to the Americans with Disabilities Act (ADA) requirements, design and construction of alternative site drainage configurations may be necessary. In this case, design and construction of adequate drainage adjacent to foundations and slabs are essential to preserving foundation support and reducing the potential for wet slab related issues. A typical example of this condition occurs in developments where the landscape grades are situated at the same elevation as the parking areas so as to not create a drop off between the grades. This condition subsequently results in flat grades between the building, landscape area, and parking are which do not meet building code requirements.

Subdrainage

Reduction of potential moisture related issues could be addressed by the construction of subdrains in addition to the drainage provisions provided in the 2019 CBC. Considering that this site is has shallow rock conditions, a subdrain should be considered along the uphill of the buildings to collect and redirect unwanted water from the structure.

Typical subdrain construction would include a 3 feet deep trench (or depth required to intercept the bottom of utility trenches) constructed as detailed on Figure C-4, Appendix C. The water collected in the subdrain pipe would be directed to an appropriate non-erosive outlet. We recommend that a representative from our firm be present during the subdrain installation procedures to document that the drain is installed in accordance with the observed field conditions, as well as to provide additional consultation as the conditions dictate. Our firm could provide additional recommendations during a plan review of the civil plans for building grading.

Subsurface Water within Utilities

Water can become perched on the relatively impermeable rock horizons and eventually inundate utility trench backfill. The variable support condition between native soils and compacted trench backfill materials, coupled with prolonged water exposure can lead to subsidence of trench backfill materials, especially if bridging of trench backfill occurs during placement or natural jetting of soils into voids around pipes occurs. Joint utility trenches are generally more susceptible to the jetting issues due to the quantity of pipe placed in the trench. Recommendations to reduce the risk associated with this condition may be provided based on observed field conditions.

Following site development, additional water sources (i.e. landscape watering, downspouts) are generally present. The presence of low permeability materials can prohibit rapid dispersion of surface and subsurface water drainage.

Utility trenches can become collection points for subsurface water and typically provide a conduit for water distribution. Provisions may be necessary to mitigate adverse effects of perched water conditions. Where this condition arises, we recommend plug and drains within the utility trenches (Figure C-5, Appendix C) to collect and convey water to the storm drain system or other approved outlet. Temporary dewatering measures may be necessary and could include the installation of submersible pumps and/or point wells.

Roadway or Parking Area Landscaping Drainage

Prolonged water seepage into pavement sections can result in softening of subgrade soils and subsequent pavement distress. It is anticipated that heavy landscape watering could enter and pond within the aggregate base section as it permeates through the aggregate base under the sidewalks and/or curbs. Prolonged seepage within the pavement section could cause distress to pavements in heavy traffic areas. Some measures that can be employed to minimize the saturation of the subgrade and aggregate base materials include, but are not limited to, construction of cut-off drains or moisture barriers alongside the roadway adjacent to the roadway interface, construction of subdrains within landscape medians and installation of plug and drain systems within utility trenches. Due to the elusive and discontinuous nature of drainage related issues, a risk-based approach should be determined by the developer based on consultation and discussions with the design professionals and the amount of protection of facilities that the developer may want to provide against potential moisture related issues.

Post Construction

All drainage related issues may not become known until after construction and landscaping are complete. Therefore, some mitigation measures may be necessary following site development.

Landscape watering is typically the largest source of water infiltration into the subgrade. Given the soil conditions on site, excessive or even normal landscape watering could contribute to moisture related problems and/or cause distress to foundations and slabs, pavements, and underground utilities, as well as creating a nuisance where seepage occurs.

8.0 LOW IMPACT DEVELOPMENT STANDARDS

Low Impact Development or LID standards have become a consideration for many projects in the region. LID standards are intended to address and mitigate urban storm water quality concerns. These methods include the use of Source Controls, Run-off Reduction and Treatment Controls. For the purpose of this report use of Run-off Reduction measures and some Treatment Controls may impact geotechnical recommendations for the project.

Hydrologic Soil Group

A review of soil survey and the data collected from test pits indicate that some soils within the project are Hydrologic Soil Group D (very slow infiltration). Use of any LID measure that would require infiltration of discharge water to surfaces adjacent to structures/pavement or include infiltration type measures should be reviewed by Youngdahl Consulting Group, Inc. during the design process.

Infiltration and Retention Basins

The introduction of water to soils adjacent to structures could increase the potential for undesirable effects such as settlement, high floor moisture, and pavement distress. For this reason, we recommend that infiltration trenches and basins are kept a minimum of 30 feet from a proposed structure unless they are lined with a 30-mil HDPE membrane to reduce the potential of concentration of water into the subsurface soils at the structure. Further recommendations may be provided based on future civil plans for the project site.

9.0 DESIGN REVIEW AND CONSTRUCTION MONITORING

Geotechnical engineering can be affected by natural variability of soils and, as with many projects, the contents of this report could be used and interpreted by many design professionals for the application and development of their plans. For these reasons, we recommend that our firm provide support through plan reviews and construction monitoring to aid in the production of a successful project.

Plan Review

The design plans and specifications should be reviewed and accepted by Youngdahl Consulting Group, Inc. prior to contract bidding. A review should be performed to determine whether the recommendations contained within this report are still applicable and/or are properly interpreted and incorporated into the project plans and specifications. Modifications to the recommendations provided in this report or to the design may be necessary at the time of our review based on the proposed plans.

Construction Monitoring

Construction monitoring is a continuation of geotechnical engineering to confirm or enhance the findings and recommendations provided in this report. It is essential that our representative be involved with all grading activities in order for us to provide supplemental recommendations as field conditions dictate. Youngdahl Consulting Group, Inc. should be notified at least two working days before site clearing or grading operations commence, and should observe the stripping of deleterious material, overexcavation of loose/soft or saturated soils and existing fills, and provide consultation, observation, and testing services to the grading contractor in the field. At a

minimum, Youngdahl Consulting Group, Inc. should be retained to provide services listed in Table 12 below.

The recommendations included in this report have been based in part on assumptions about strata variations that may be tested only during earthwork. Accordingly, these recommendations should not be applied in the field unless Youngdahl Consulting Group, Inc. is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method. Youngdahl Consulting Group, Inc. cannot assume responsibility or liability for the adequacy of its recommendations when they are used in the field without Youngdahl Consulting Group, Inc. being retained to observe construction.

10.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This report has been prepared for the exclusive use of the addressee of this report for specific application to this project. The addressee may provide their consultants authorized use of this report. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, expressed or implied.

2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

3. Section [A] 107.3.4 of the 2019 California Building Code states that, in regard to the design professional in responsible charge, the building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

   WARNING: Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Youngdahl Consulting Group, Inc. must review them to assess their impact on this report's applicability. Also note that Youngdahl Consulting Group, Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the express written authorization of Youngdahl Consulting Group, Inc.

4. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. Should any variations or undesirable conditions be encountered during the development of the site, Youngdahl Consulting Group, Inc. will provide supplemental recommendations as dictated by the field conditions.

Table 12: Checklist of Recommended Services

Item Description		Recommended	Not Anticipated
1	Provide foundation design parameters	Included	
2	Review grading plans and specifications	✓	
3	Review foundation plans and specifications	✓	
4	Observe and provide recommendations regarding demolition	✓	
5	Observe and provide recommendations regarding site stripping	✓	
6	Observe and provide recommendations on moisture conditioning removal, and/or recompaction of unsuitable existing soils	✓	
7	Observe and provide recommendations on the installation of subdrain facilities	✓	
8	Observe and provide testing services on fill areas and/or imported fill materials	✓	
9	Review as-graded plans and provide additional foundation recommendations, if necessary	✓	
10	Observe and provide compaction tests on storm drains, water lines and utility trenches	✓	
11	Observe foundation excavations and provide supplemental recommendations, if necessary, prior to placing concrete	✓	
12	Observe and provide moisture conditioning recommendations for foundation areas and slab-on-grade areas prior to placing concrete		✓
13	Provide design parameters for retaining walls	✓	
14	Provide finish grading and drainage recommendations	Included	
15	Provide geologic observations and recommendations for keyway excavations and cut slopes during grading	✓	
16	Excavate and recompact all test pits within structural areas	✓	

APPENDIX A

Field Study

Vicinity Map
Site Plan
Logs of Exploratory Test Pits
Soil Classification Chart and Log Exploration

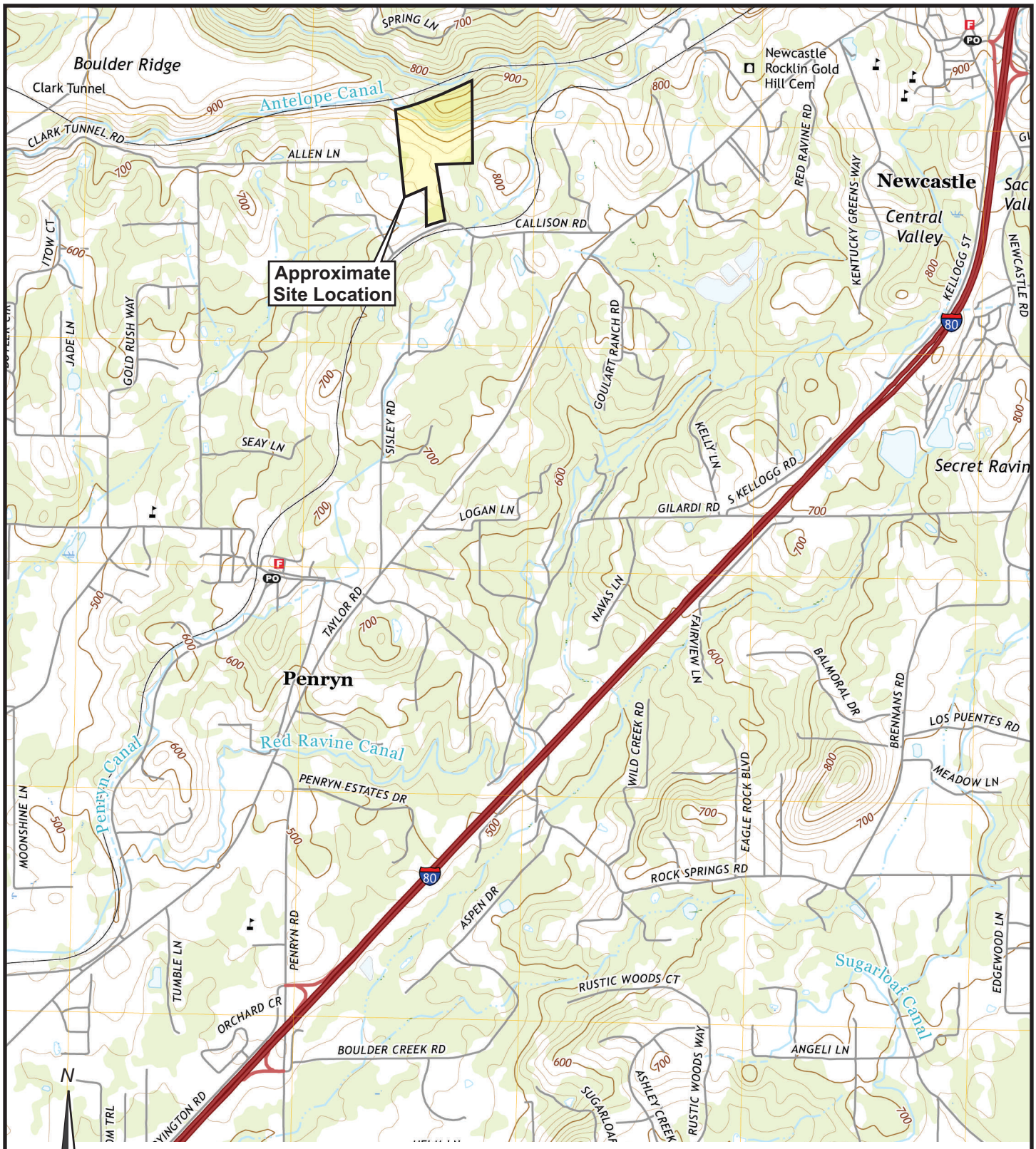
Introduction

The contents of this appendix shall be integrated with the geotechnical engineering study of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Our recent field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 12 April 2022, which included the excavation of 8 test pits under his direction at the approximate locations shown on Figure A-2, this Appendix. Excavation of the test pits was accomplished with a CAT 315 trackhoe equipped with a 30-inch-wide bucket. The bulk and bag samples collected from the test pits returned to our laboratory for further examination and testing.

The Exploratory Test Pit Logs describe the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradual, our logs indicate the average contact depth. Our logs also graphically indicate the sample type, sample number, and approximate depth of each soil sample obtained from the test pits.

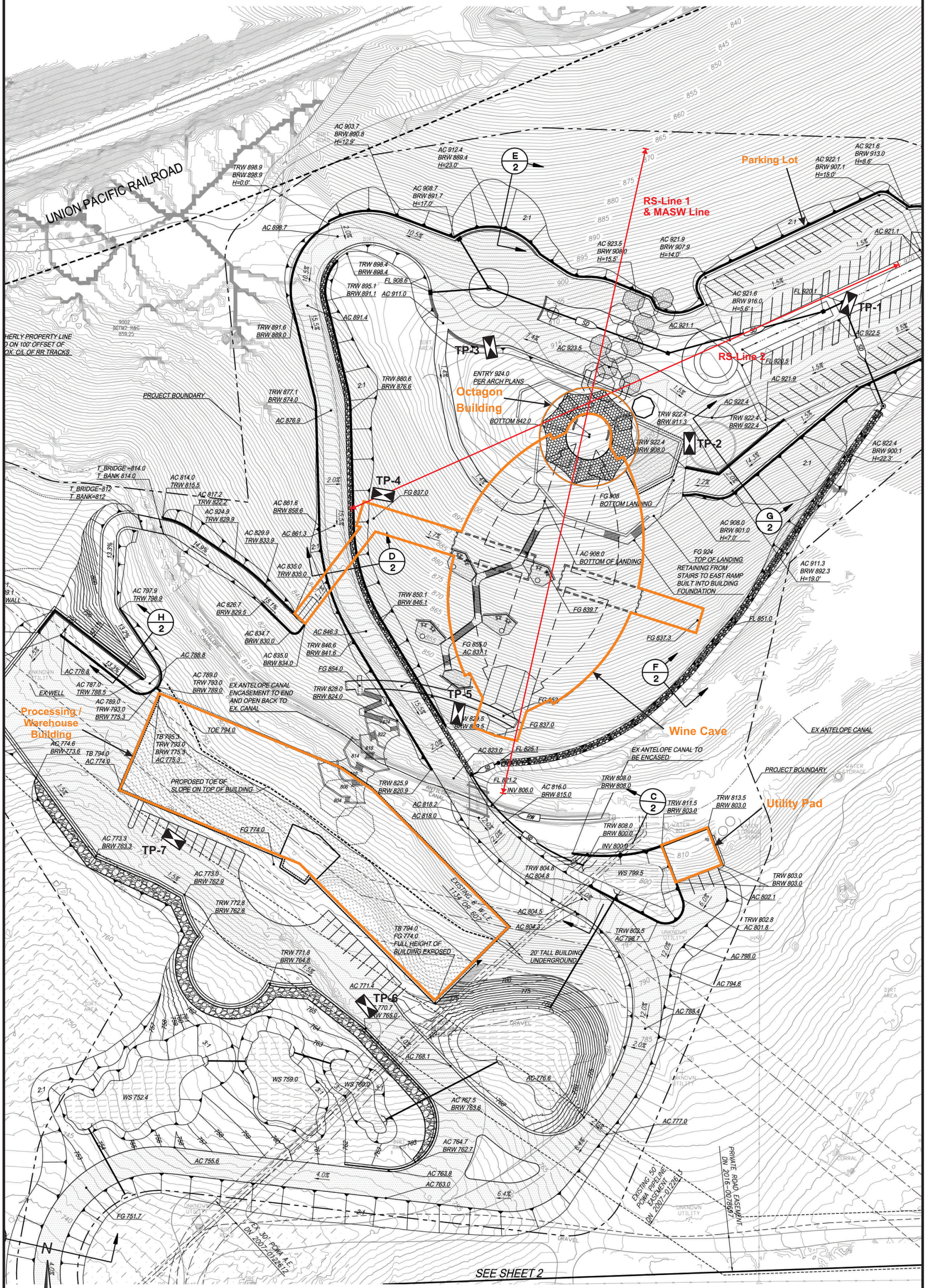
The soils encountered were logged during this and a previous excavation and provide the basis for the "Logs of Test Pits", Figures A-3 through A-10, this Appendix. These logs show a graphic representation of the soil profile, the location, and depths at which samples were collected.



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Rocklin Quadrangle, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E22116.001	**VICINITY MAP** **Project 8** Penryn, California	**FIGURE A-1**
	May 2022		



TP-1 = Approximate Test Pit Locations

RS-1 = Refraction Seismic Line

MASW = Multichannel Analysis of Surface Waves

REFERENCE: *Conceptual Grading Pna, Penryn Winery, MacKay & Somps, Job #: 18511, Dated 2/22/2021*

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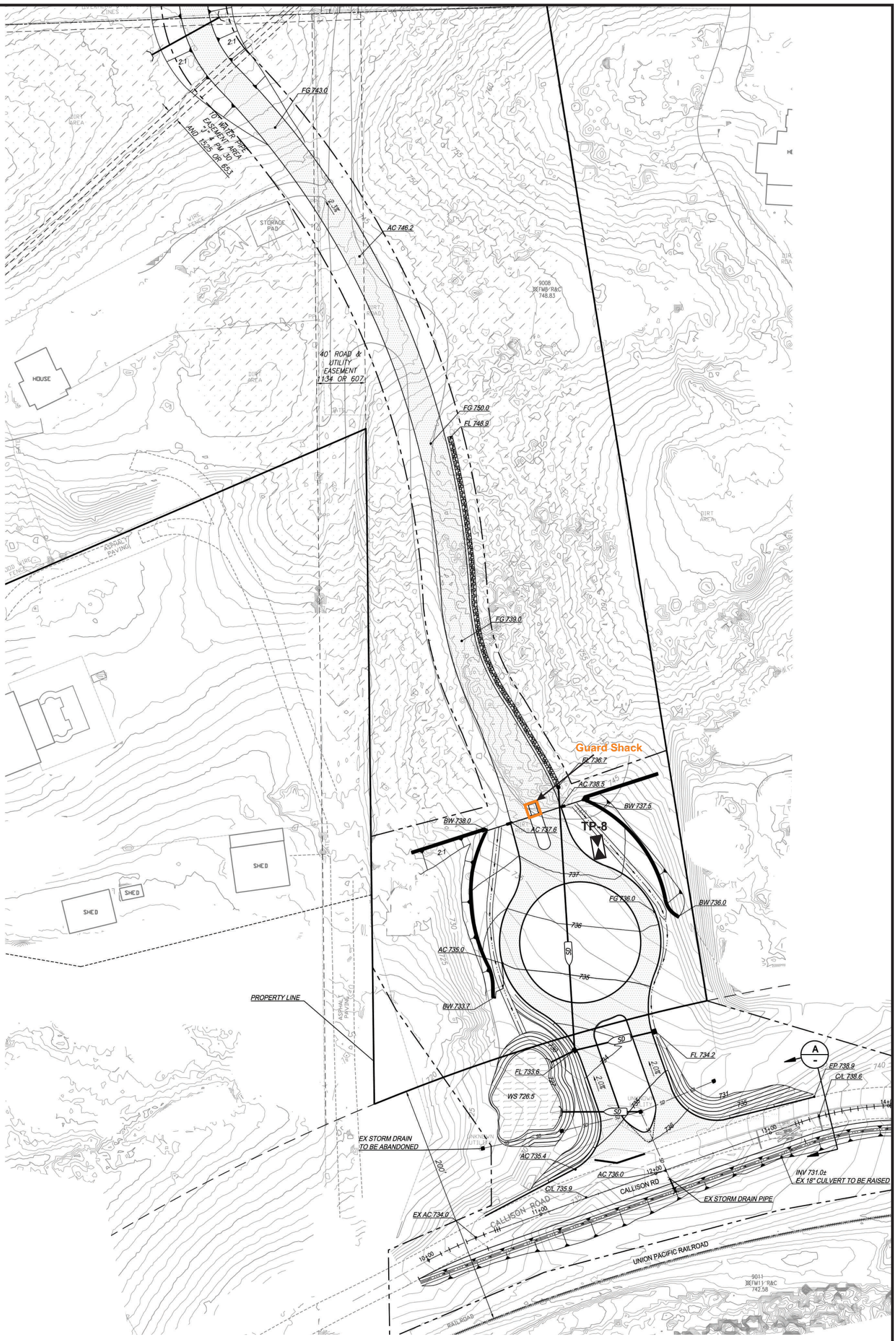
Project No.: E22116.001

May 2022

SITE PLAN

Project 8
Penryn, California

FIGURE
A-2a



N

0 40 80 160

Approximate Scale: 1" = 80'

TP-1 = Approximate Test Pit Locations

REFERENCE: *Conceptual Grading Pna, Penryn Winery, MacKay & Somps, Job #: 18511, Dated 2/22/2021*

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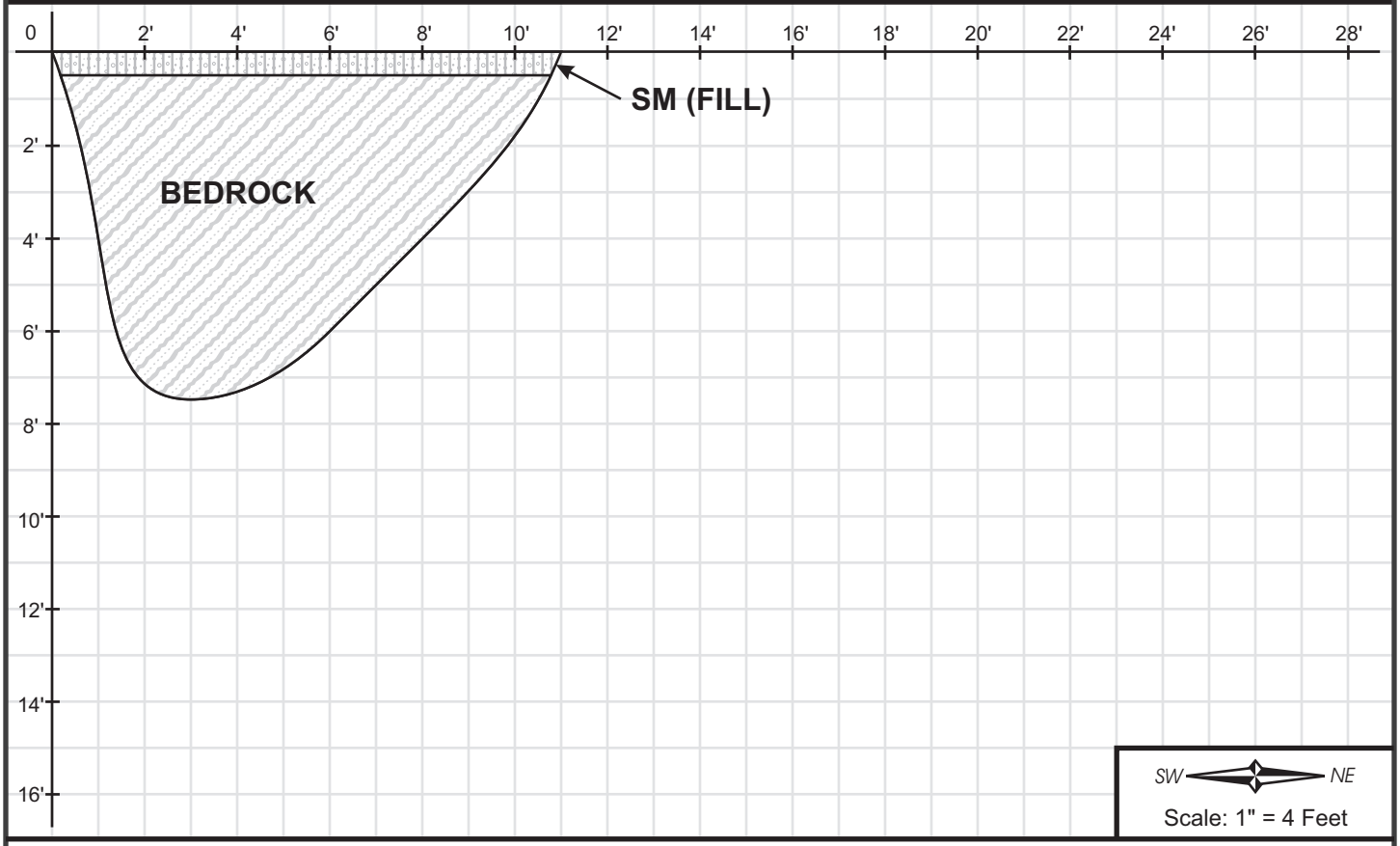
SITE PLAN

Project 8
Penryn, California

FIGURE
A-2b

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.870999° / W 121.159598°**	Pit No. **TP-1**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **200°**	Elevation: **~**

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 0.5'	Grey silty **SAND (SM)** with cobble, medium dense, dry, with roots (FILL?)		**TP-1 @ 2-4'** R-Value = 30
@ 0.5' - 1'	Red yellow quartz diorite **BEDROCK**, completely weathered, soft, slightly moist		
@ 1' - 7.5'	*Grades moderately soft*	**TP-1** @ 2-4'	
	Test pit terminated at 7.5' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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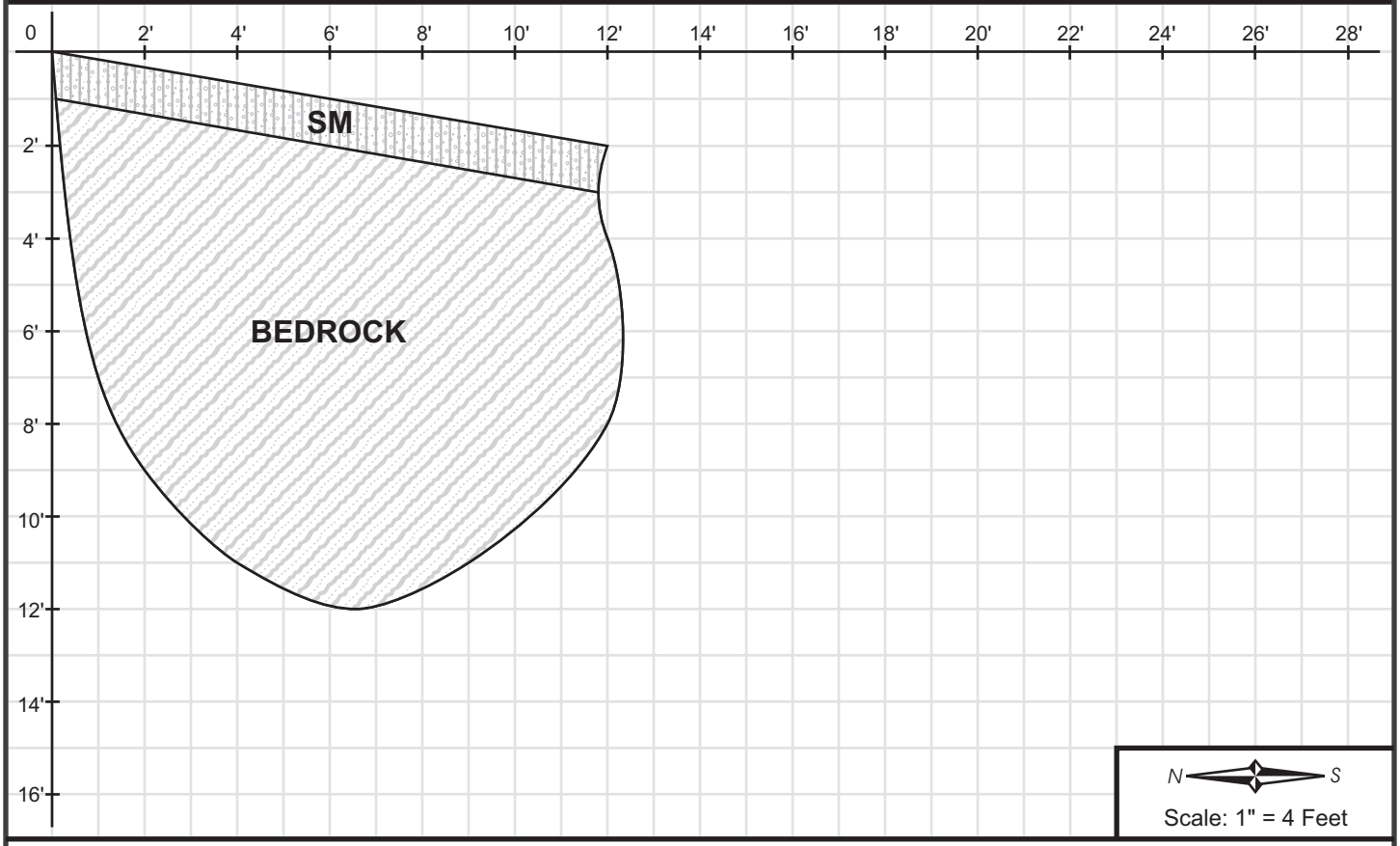
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE **A-3**

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.870779° / W 121.159950°**		Pit No. **TP-2**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **3°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Grey silty **SAND (SM)**, dense, dry, with roots		
@ 1' - 6'	Red yellow quartz diorite **BEDROCK**, completely weathered, soft to moderately hard, dry		
@ 6' - 12'	*Grades slightly moist*	**TP-2** @ 6-8'	
	Test pit terminated at 12' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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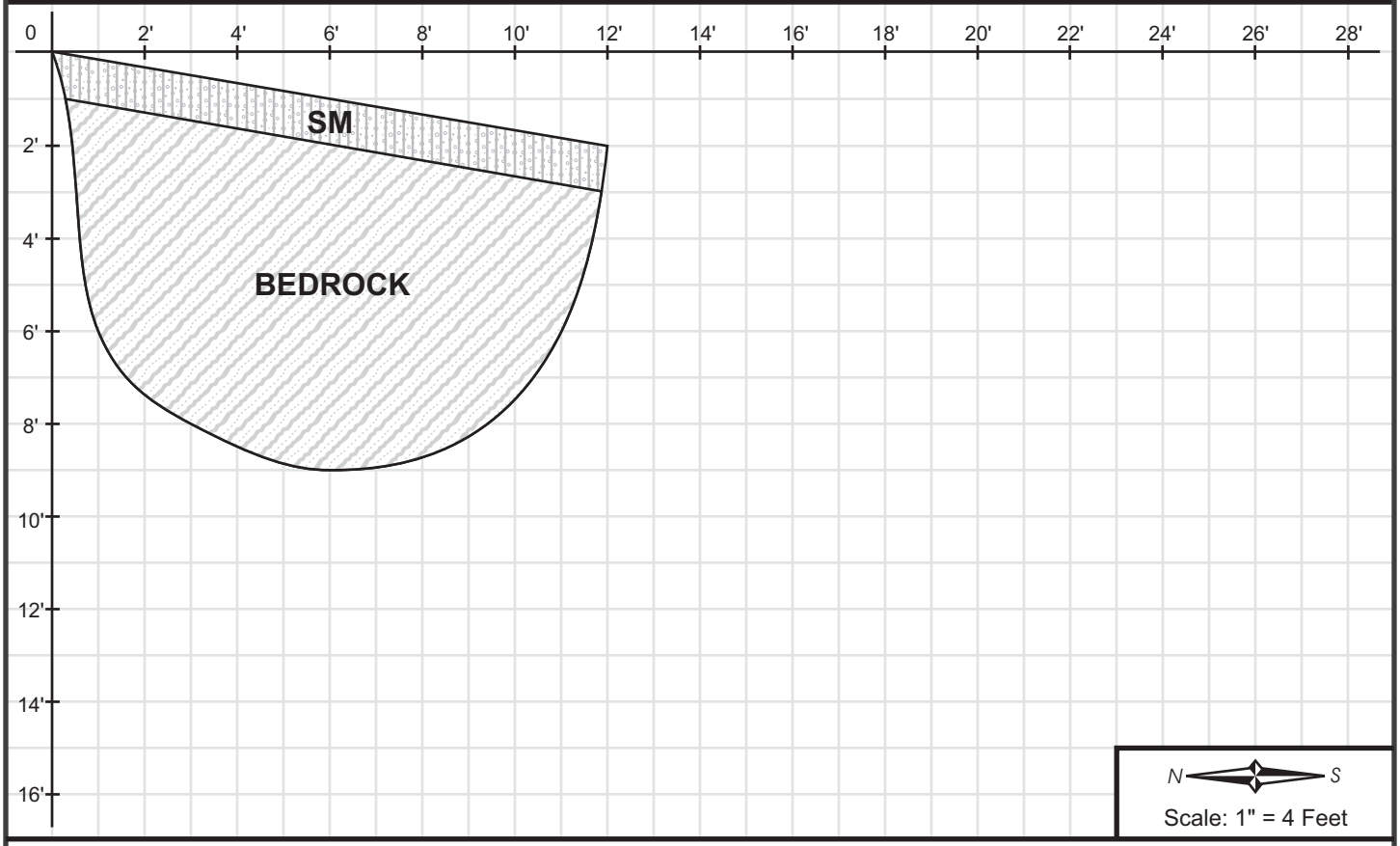
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE **A-4**

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.870981° / W 121.160613°**		Pit No. **TP-3**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **350°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0′ - 1′	Yellow brown silty **SAND (SM)**, dense, dry, with roots		*1.5" Hard angular rock piece @ 6′*
@ 1′ - 9′	Red yellow quartz diorite **BEDROCK**, completely weathered, soft to moderately soft, dry to slightly moist		
	Test pit terminated at 9' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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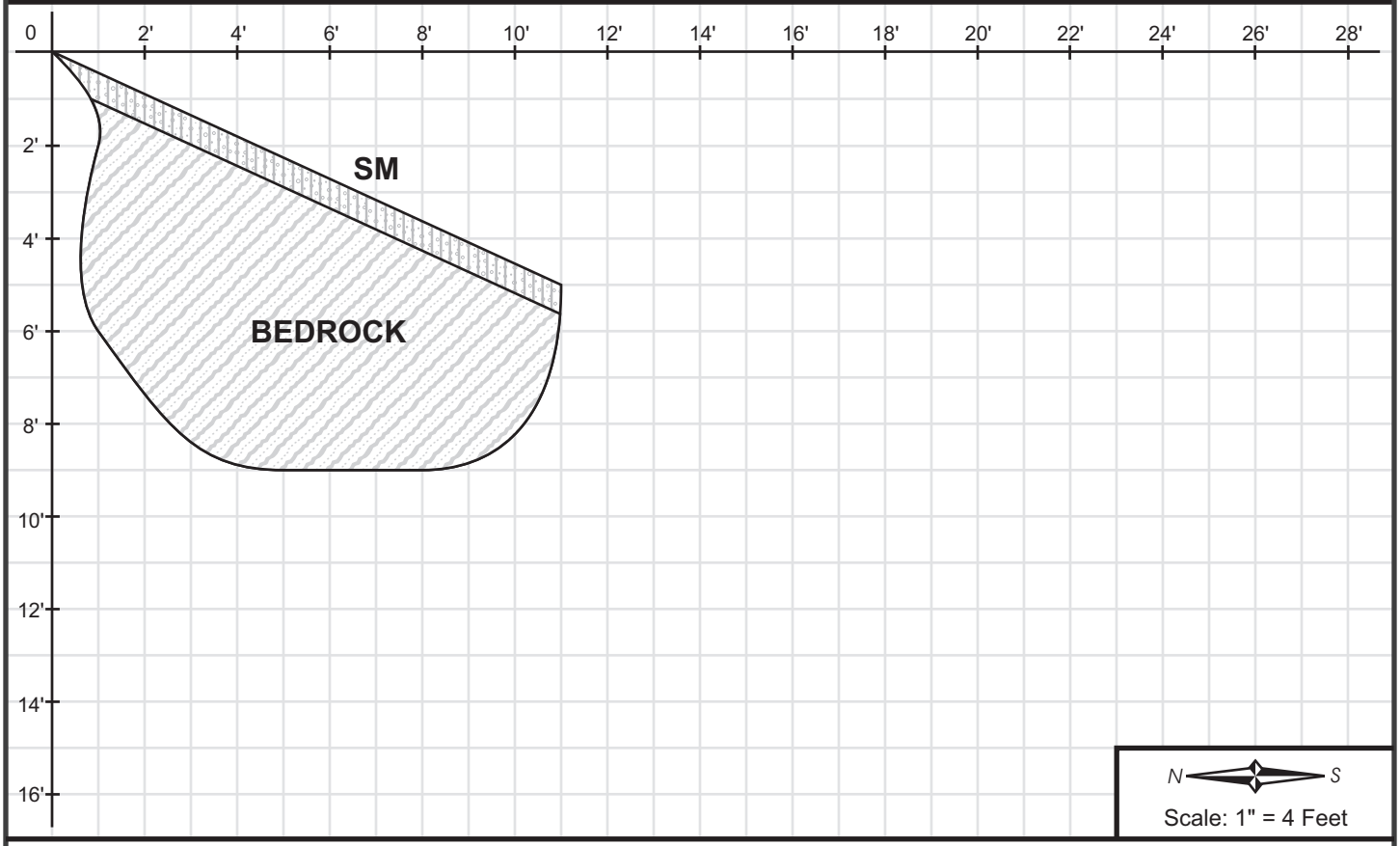
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE A-5

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.870515° / W 121.168652°**		Pit No. **TP-4**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **280°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0′ - 1′	Yellow brown silty **SAND (SM)**, medium dense, dry, with roots	**TP-4** @ 0-1'	**TP-4 @ 0-1'** ϕ = 39.0°, c = 201 psf DDmax = 133.0 pcf MCopt = 8.0%
@ 1′ - 9′	Red yellow quartz diorite **BEDROCK**, completely weathered, soft, dry to slightly moist		
	Test pit terminated at 9' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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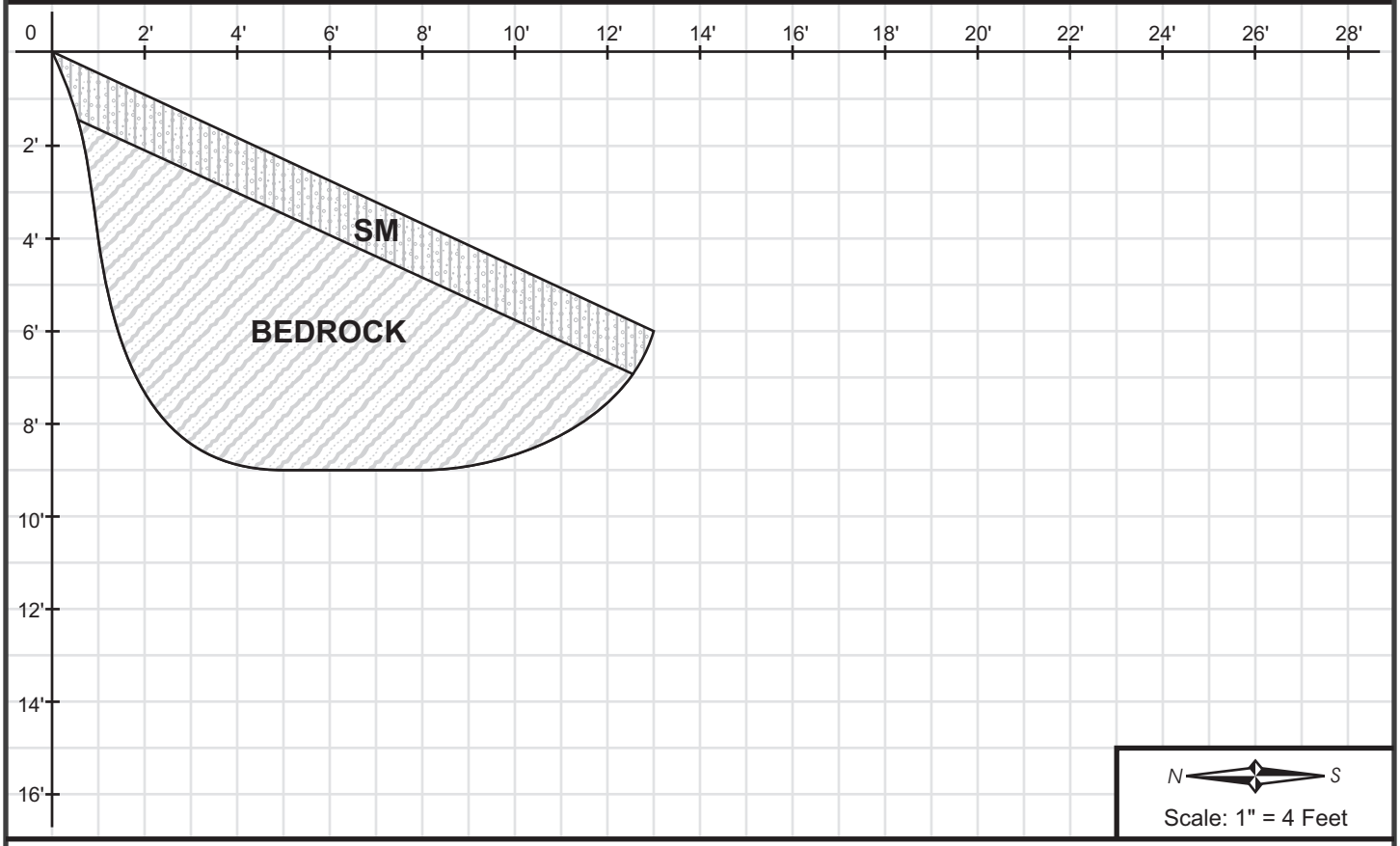
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE **A-6**

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.870078° / W 121.160683°**		Pit No. **TP-5**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **10°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1.5'	Yellow brown silty **SAND (SM)**, medium dense, dry, with roots		
@ 1.5' - 4'	Red yellow to yellow brown quartz diorite **BEDROCK**, completely weathered, soft, dry		
@ 4' - 9'	*Grades highly weathered, moderately soft to moderately hard, slightly moist*		
	Test pit terminated at 9' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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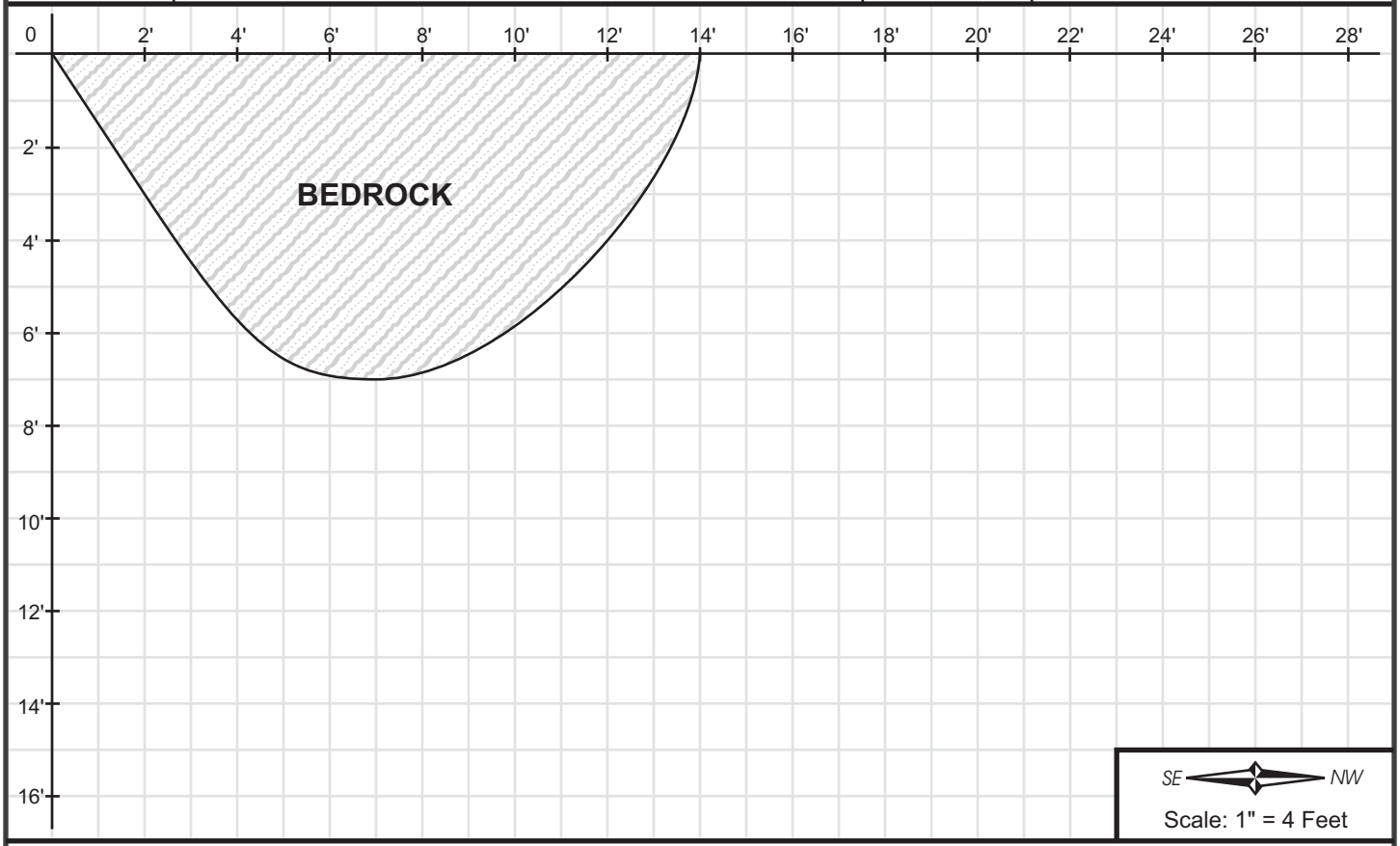
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE A-7

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.869390° / W 121.161065°**		Pit No. **TP-6**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **140°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 5'	Red yellow quartz diorite **BEDROCK**, highly weathered, moderately soft, slightly moist		*Test pit located in cut area*
@ 5' - 7'	*Grades moderately hard to hard, moist*		
	Test pit terminated at 7' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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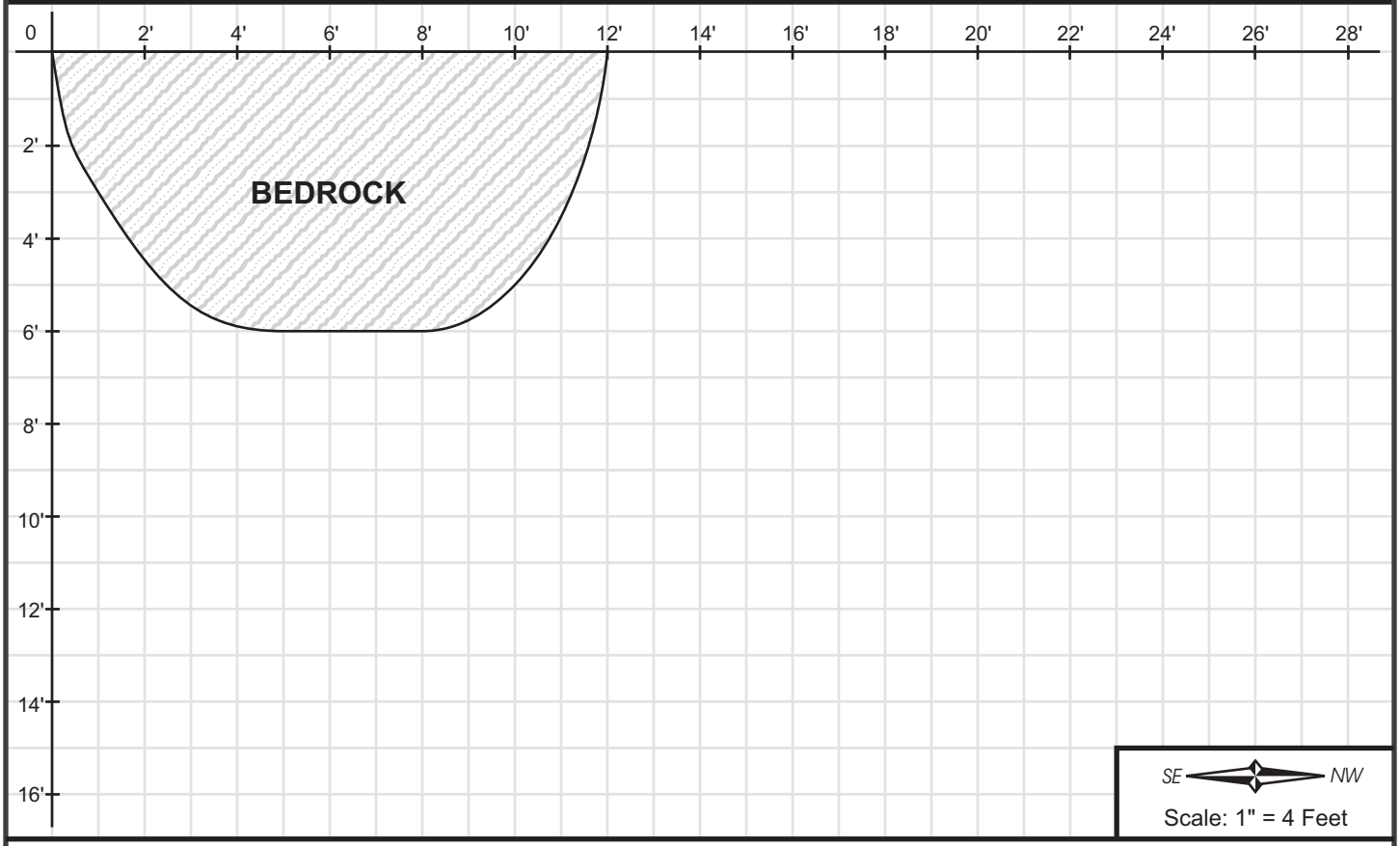
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE A-8

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.869846° / W 121.161654°**		Pit No. **TP-7**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **125°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 6'	Red yellow to yellow brown quartz diorite **BEDROCK**, highly weathered, moderately soft to moderately hard, slightly moist	**TP-7** @ 0-2'	*Test pit located in cut area* **TP-7 @ 0-2'** Corrosion Suite
	Test pit terminated at 6' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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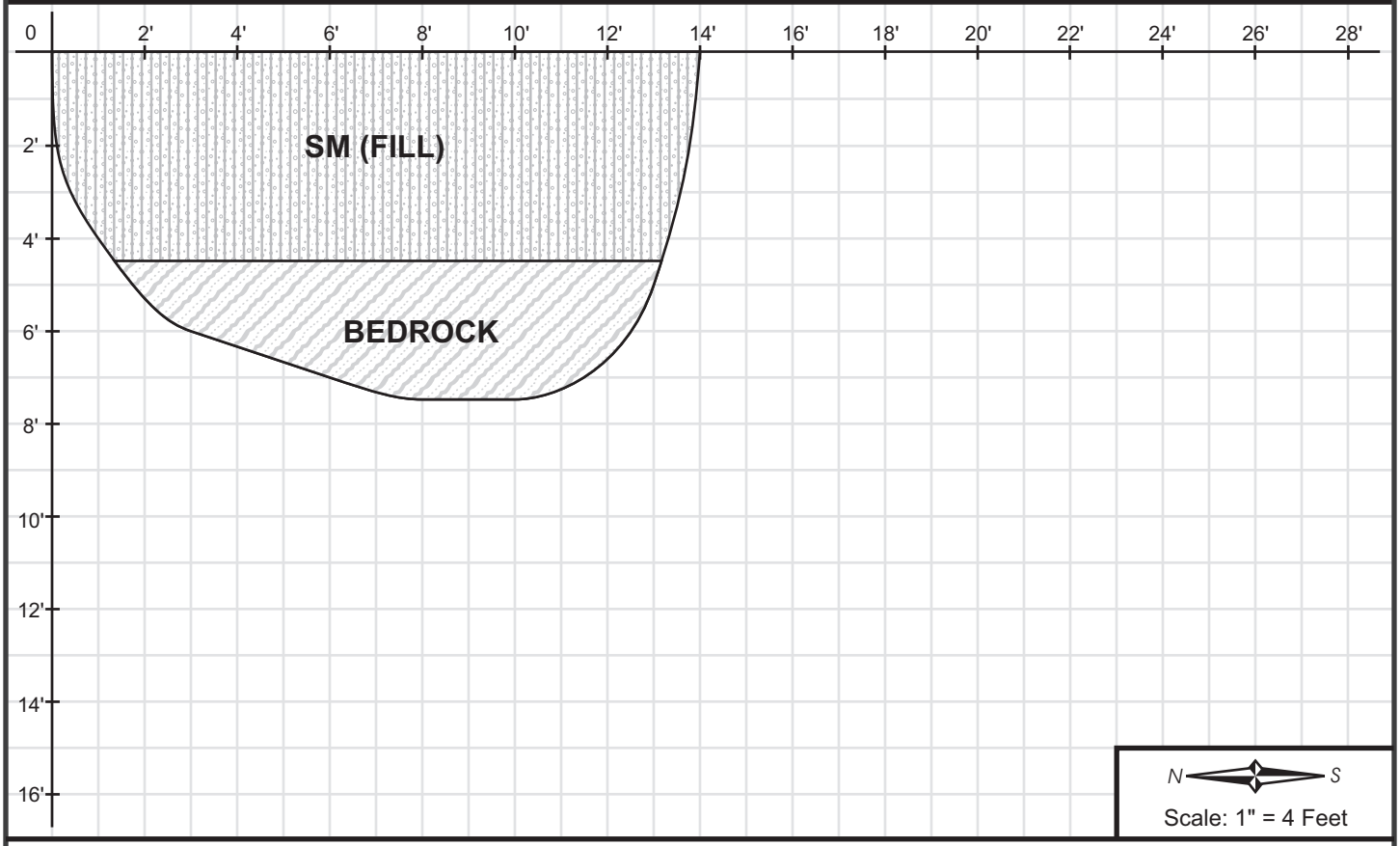
EXPLORATORY TEST PIT LOG

Project 8
Penryn, California

FIGURE A-9

Logged By: **PF**	Date: **12 April 2022**	Lat / Lon: **N 38.866865° / W 121.160926°**		Pit No. **TP-8**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **350°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 4.5'	Brown to yellow brown silty **SAND (SM)** with trace clay, gravel, and cobble, rounded to sub-angular, dense to very dense, dry to slightly moist (FILL)	**TP-8** @ 1-3'	
@ 4.5' - 7.5'	Red yellow to yellow brown quartz diorite **BEDROCK**, highly weathered, soft to moderately soft, slightly moist		
	Test pit terminated at 7.5' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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EXPLORATORY TEST PIT LOG

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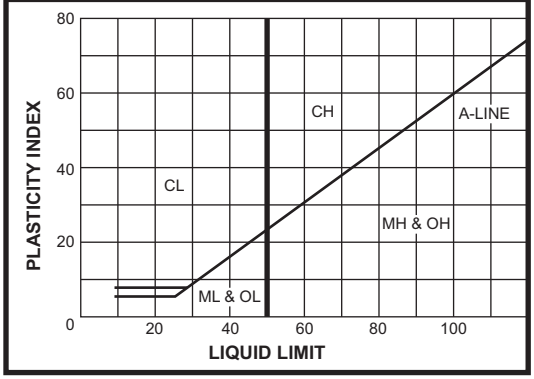
FIGURE A-10

UNIFIED SOIL CLASSIFICATION SYSTEMS

MAJOR DIVISION			SYMBOLS		TYPICAL NAMES
COARSE GRAINED SOILS Over 50% > #200 sieve	**GRAVELS** Over 50% > #4 sieve	Clean **GRAVELS** With Little Or No Fines	GW		Well graded **GRAVELS**, **GRAVEL-SAND** mixtures
			GP		Poorly graded **GRAVELS**, **GRAVEL-SAND** mixtures
		GRAVELS With Over 12% Fines	GM		Silty **GRAVELS**, poorly graded **GRAVEL-SAND-SILT** mixtures
			GC		Clayey **GRAVELS**, poorly graded **GRAVEL-SAND-CLAY** mixtures
	SANDS Over 50% < #4 sieve	Clean **SANDS** With Little Or No Fines	SW		Well graded **SANDS**, gravelly **SANDS**
			SP		Poorly graded **SANDS**, gravelly **SANDS**
		SANDS With Over 12% Fines	SM		Silty **SANDS**, poorly graded **SAND-SILT** mixtures
			SC		Clayey **SANDS**, poorly graded **SAND-CLAY** mixtures
FINE GRAINED SOILS Over 50% < #200 sieve	**SILTS & CLAYS** Liquid Limit < 50		ML		Inorganic **SILTS**, silty or clayey fine **SANDS**, or clayey **SILTS** with plasticity
			CL		Inorganic **CLAYS** of low to medium plasticity, gravelly, sandy, or silty **CLAYS**, lean **CLAYS**
			OL		Organic **CLAYS** and organic silty **CLAYS** of low plasticity
	SILTS & CLAYS Liquid Limit > 50		MH		Inorganic **SILTS**, micaceous or diamacious fine sandy or silty soils, elastic **SILTS**
			CH		Inorganic **CLAYS** of high plasticity, fat **CLAYS**
			OH		Organic **CLAYS** of medium to high plasticity, organic **SILTS**
HIGHLY ORGANIC CLAYS			PT		PEAT & other highly organic soils

PLASTICITY CHART

USED FOR CLASSIFICATION OF FINE GRAINED SOILS

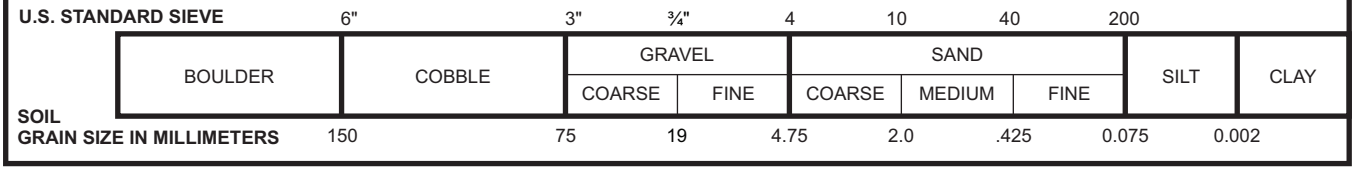


SAMPLE DRIVING RECORD

BLOWS PER FOOT	DESCRIPTION
25	25 Blows drove sampler 12 inches, after initial 6 inches of seating
50/7"	50 Blows drove sampler 7 inches, after initial 6 inches of seating
50/3"	50 Blows drove sampler 3 inches during or after initial 6 inches of seating

Note: To avoid damage to sampling tools, driving is limited to 50 blows per 6 inches during or after seating interval.

SOIL GRAIN SIZE



KEY TO PIT & BORING SYMBOLS

- Standard Penetration test
- 2.5" O.D. Modified California Sampler
- 3" O.D. Modified California Sampler
- Shelby Tube Sampler
- 2.5" Hand Driven Liner
- Bulk Sample
- Water Level At Time Of Drilling
- Water Level After Time Of Drilling
- P — Perched Water

KEY TO PIT & BORING SYMBOLS

- Joint
- Foliation
- Water Seepage
- NFWE — No Free Water Encountered
- FWE — Free Water Encountered
- REF — Sampling Refusal
- DD — Dry Density (pcf)
- MC — Moisture Content (%)
- LL — Liquid Limit
- PI — Plasticity Index
- PP — Pocket Penetrometer
- UCC — Unconfined Compression (ASTM D2166)
- TVS — Pocket Torvane Shear
- EI — Expansion Index (ASTM D4829)
- Su — Undrained Shear Strength

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SOIL CLASSIFICATION CHART AND LOG EXPLANATION
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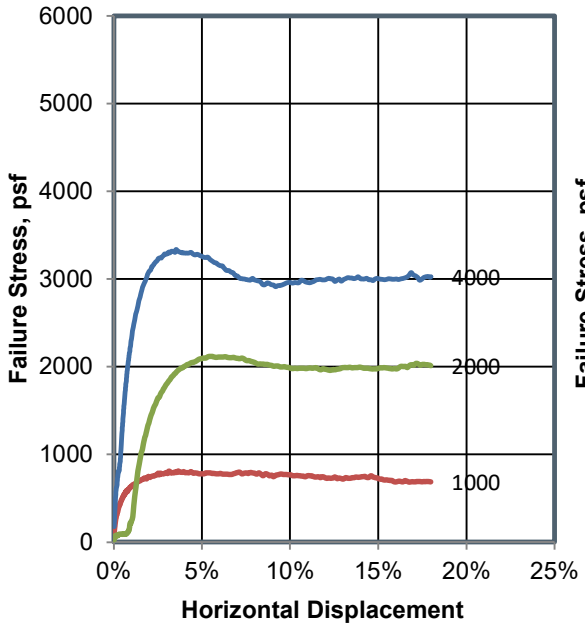
FIGURE
A-11

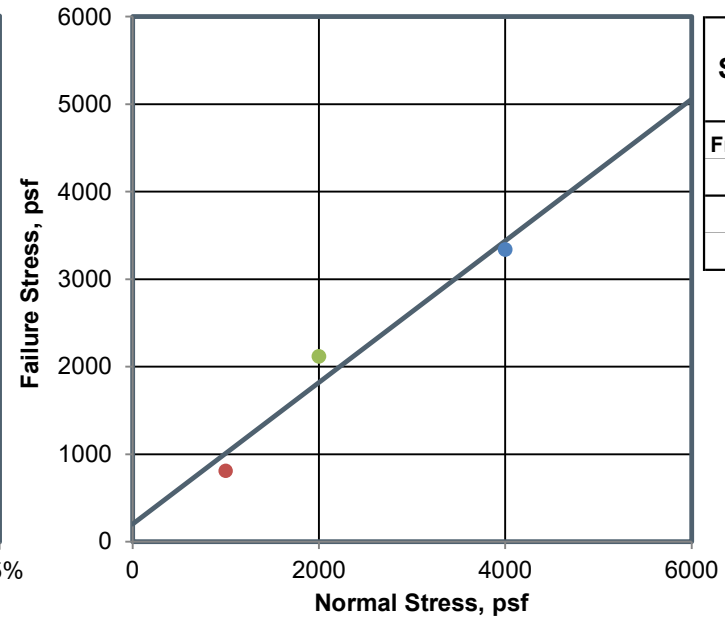
APPENDIX B

Laboratory Testing

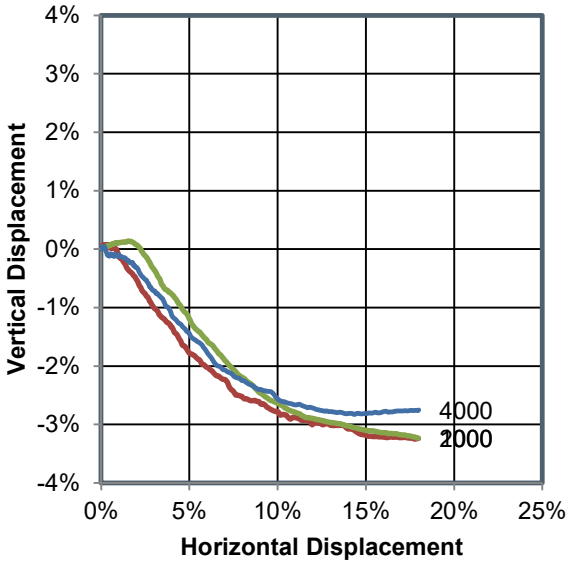
Direct Shear Test
Modified Proctor Test
Resistance Value Test
Corrosivity Test

Direct Shear Test of Soils Under Consolidated Drained Conditions, ASTM D3080





Direct Shearbox Results
Friction Angle
39.0°
Cohesion
201 psf



Test No.		1	2	3
Initial	Wet Density, pcf	129.3	129.3	129.3
	Dry Density, pcf	119.7	119.7	119.7
	Moisture Content, %	8.0	8.0	8.0
	Diameter, in	2.50	2.50	2.50
	Height, in	1.00	1.00	1.00
Pre Shear	Wet Density, pcf	142.5	143.3	145.8
	Dry Density, pcf	121.0	122.4	123.7
	Moisture Content, %*	17.8	17.1	17.8
	Diameter, in	2.50	2.50	2.50
	Height, in	0.99	0.98	0.97
Normal Stress, psf		1000	2000	4000
Failure Stress, psf		811	2118	3337
Failure Strain, %		3.66	5.47	3.54
Rate, in/min			0.0025	

*Based on post shear moisture content

Sample Type: Remolded to 90% RC

Material Description: **Brown Silty SAND with trace Gravel**

Source:

Notes: Gravel removed from test sample.

Sample No./Depth:	TP-4 @ 0-1'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	4/12/2022				2	
Date Test Started:	4/15/2022					

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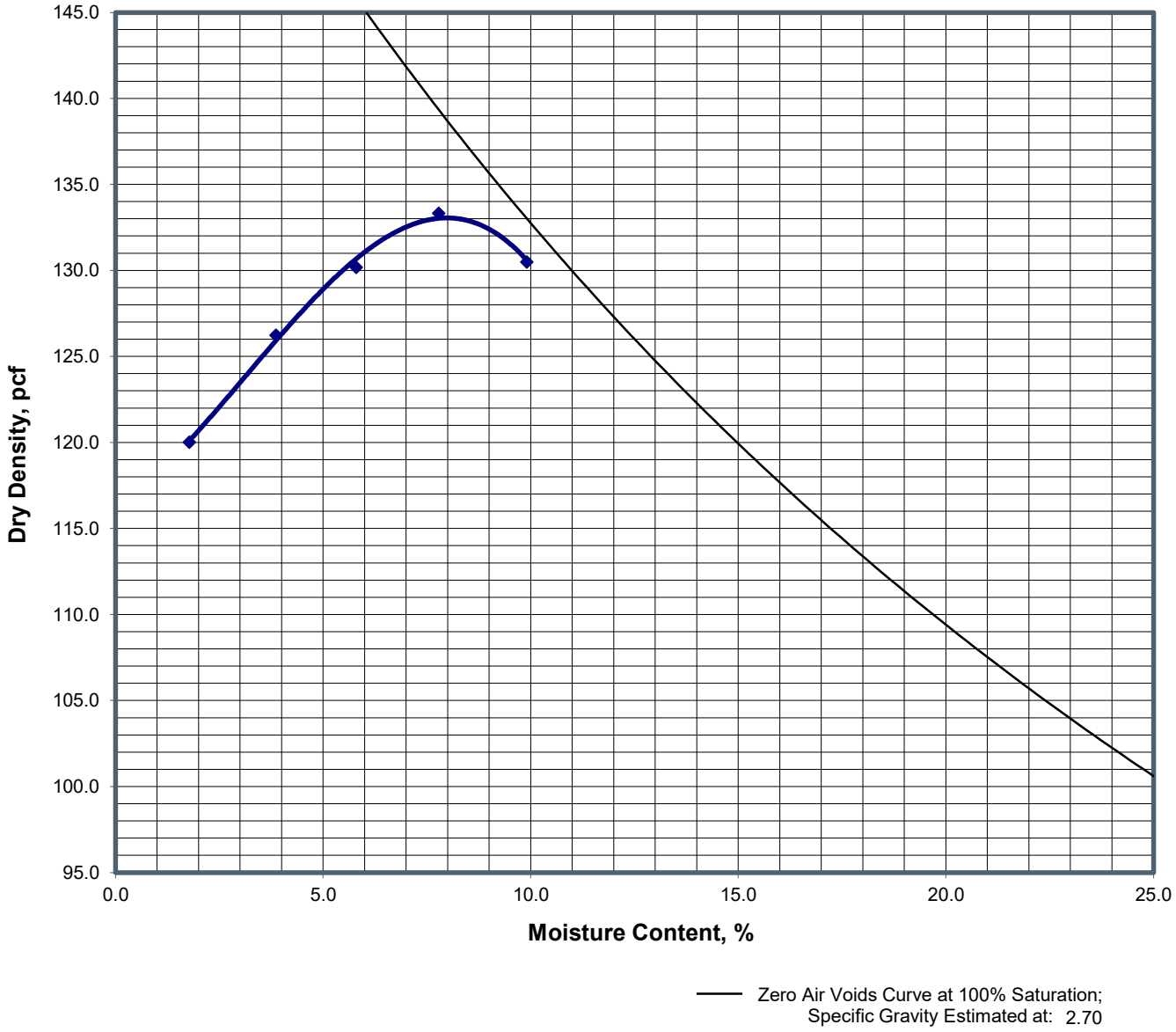
Project: **Project 8 GES**

Project No.: **E22116.001**

Figure B-1

Reviewed By: DN Date: 4/18/2022

Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 lf-lbf/ft3), ASTM D1557, Method A



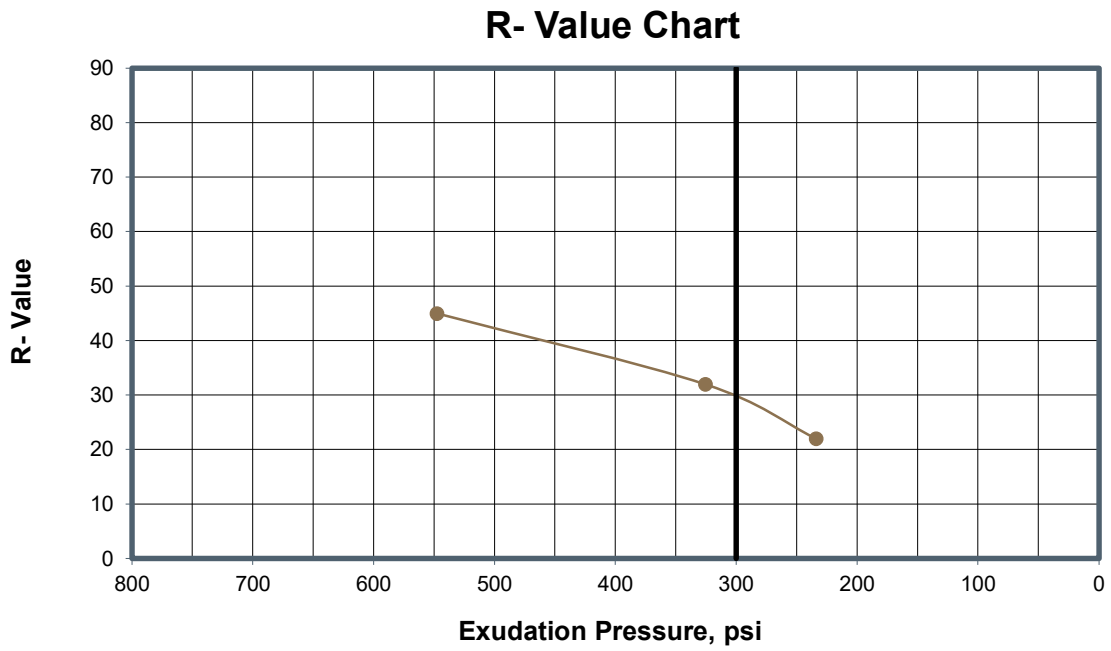
Maximum Dry Density, pcf:	**133.0**	Optimum Moisture Content, %:	**8.0**
Material Description:	**Brown Silty SAND with trace Gravel**		
Source:			
Notes:			

Sample No./Depth:	TP-4 @ 0-1'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4 :	% Less than No. 200
Date Sampled:	4/12/2022					
Date Test Started:	4/14/2022				2	

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ESTABLISHED 1984
1234 Glenhaven Court, El Dorado Hills, CA 95762
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Project:	**Project 8 GES**		
Project No.:	**E22116.001**		Figure
Reviewed By:	JGR	Date: 4/15/2022	B-2

Resistance "R" Value of Soil and Soil-Aggregate Mixtures, CTM 301



Test Specimen No.:	1	2	3
Moisture Content at Test, %	10.9	12.0	13.1
Dry Density at Test, pcf	129.8	126.7	124.2
Expansion Pressure, psf	52	43	4
Exudation Pressure, psi	548	326	234
Resistance "R" Value	45	32	22
"R" Value at 300 psi Exudation Pressure			**30**

Material Description: **Brown Silty SAND with Gravel**

Source:

Notes:

Sample No./Depth:	TP-1 @ 2-4'	USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled: 4/12/2022	Date Test Started: 4/26/2022				11	

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Project: **Project 8 GES**

Project No.: **E22116.001**

Figure B-3

Reviewed By: JLC Date: 4/28/2022

Sunland Analytical

11419 Sunrise Gold Circle, #10
Rancho Cordova, CA 95742
(916) 852-8557

RECEIVED APR 21 2022

Date Reported 04/20/2022
Date Submitted 04/15/2022

To: Jeffry Cannon
Youngdahl Consulting Group
1234 Glenhaven Ct.
El Dorado Hills, CA 95630

From: Gene Oliphant, Ph.D. \ Randy Horney
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : E22116.001 PROJECT 8 Site ID : TP-7 @ 0-2.
Thank you for your business.

* For future reference to this analysis please use SUN # 87158-181342.

EVALUATION FOR SOIL CORROSION

Soil pH	5.27	
Minimum Resistivity	5.90 ohm-cm (x1000)	
Chloride	1.8 ppm	00.00018 %
Sulfate	2.1 ppm	00.00021 %

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

APPENDIX C

Geotechnical Drainage Details

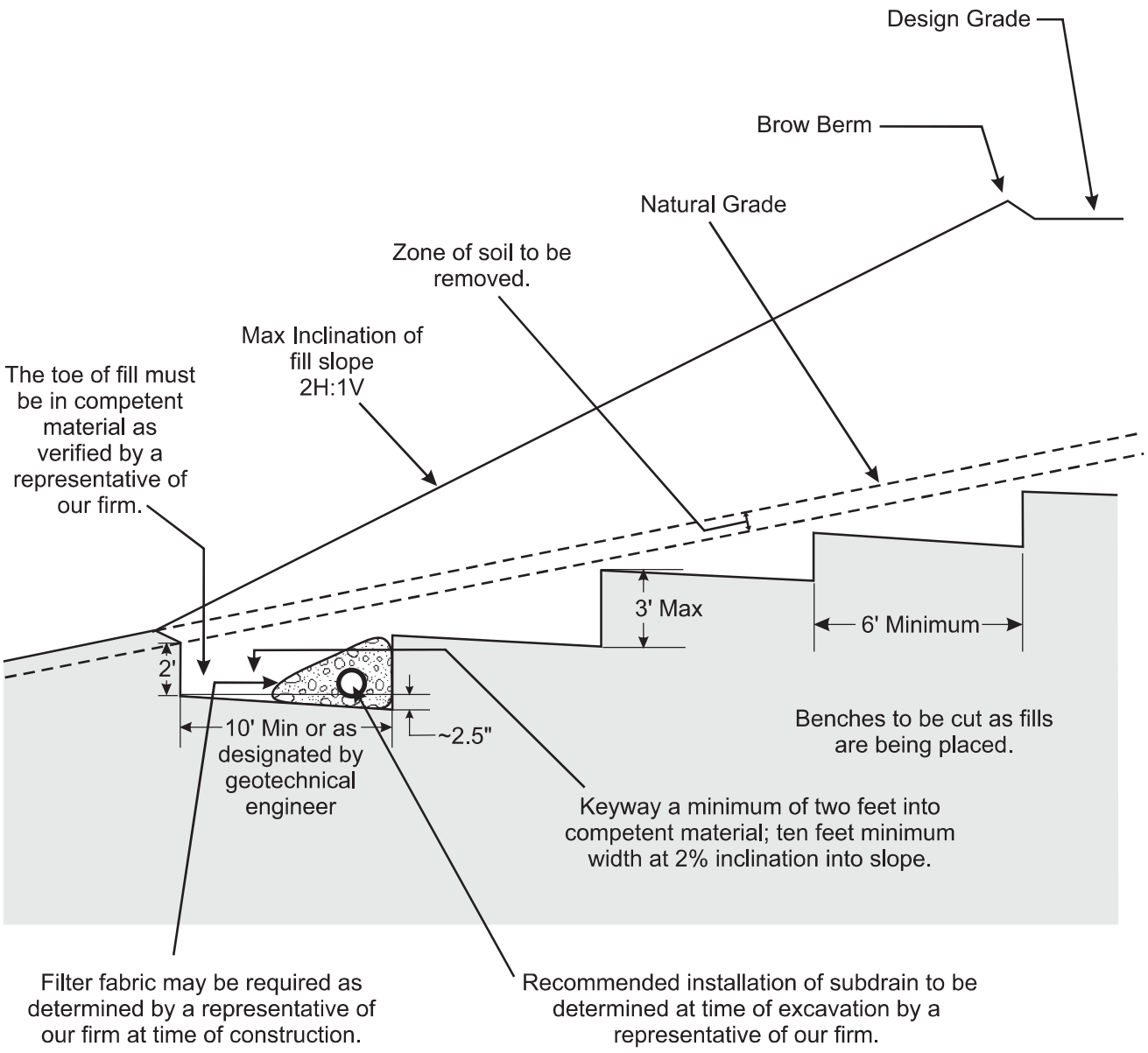
Keyway and Bench with Drain
Site Wall Drainage
Stemwall Drain
Sub-Drain
Plug and Drain

PLACEMENT OF FILL ON NATURAL SLOPE

(Typical)

All keyways should be observed and approved prior to placement of fill.

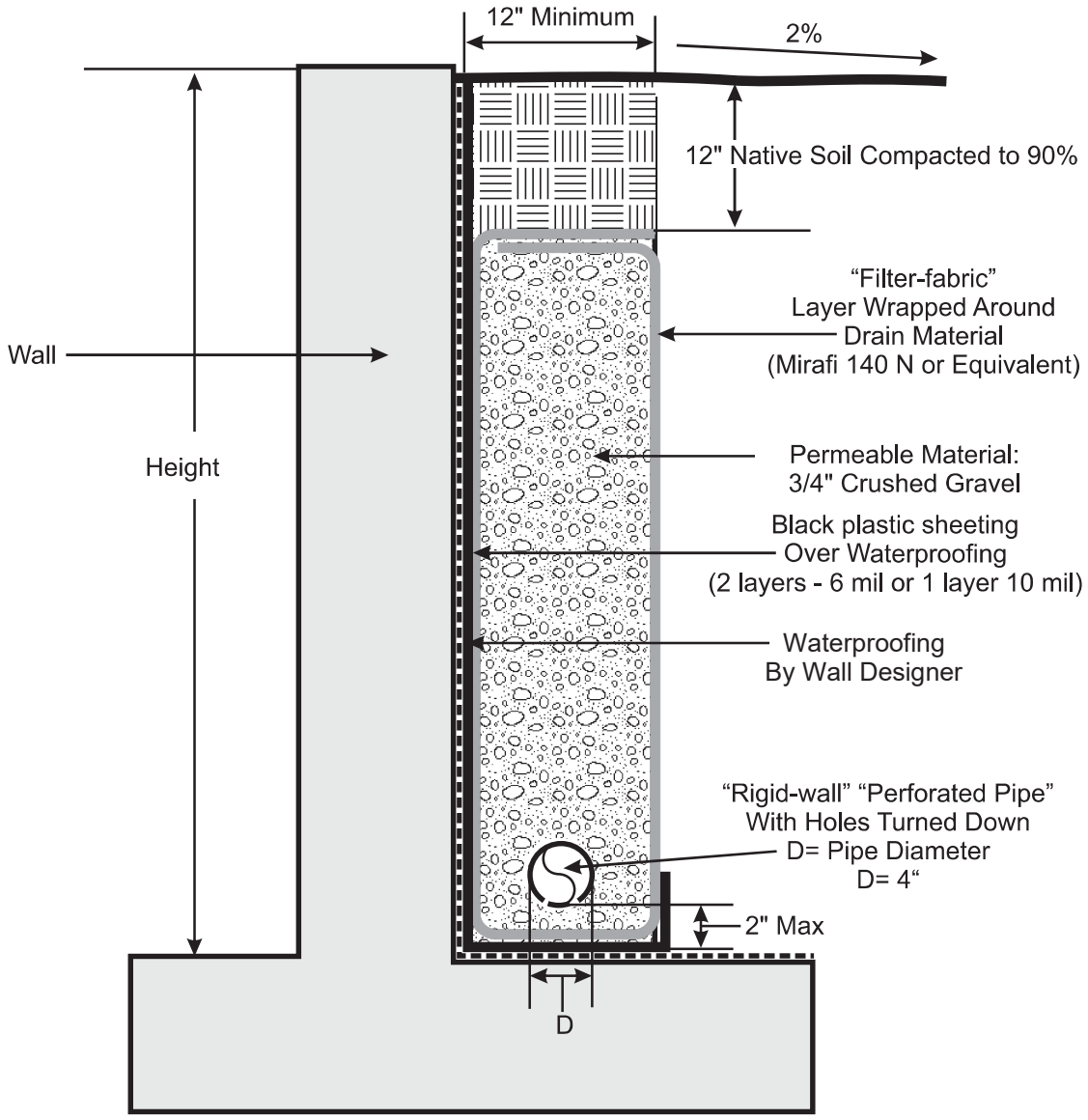
A keyway is required by CBC for fills on natural slopes of 5H:1V or steeper.



YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E22116.001 May 2022	**KEYWAY & BENCH WITH DRAIN** **Project 8** Penryn, California	FIGURE **C-1**

Retaining Wall With "Perforated Pipe Sub-Drain"

(Typical Cross Section)

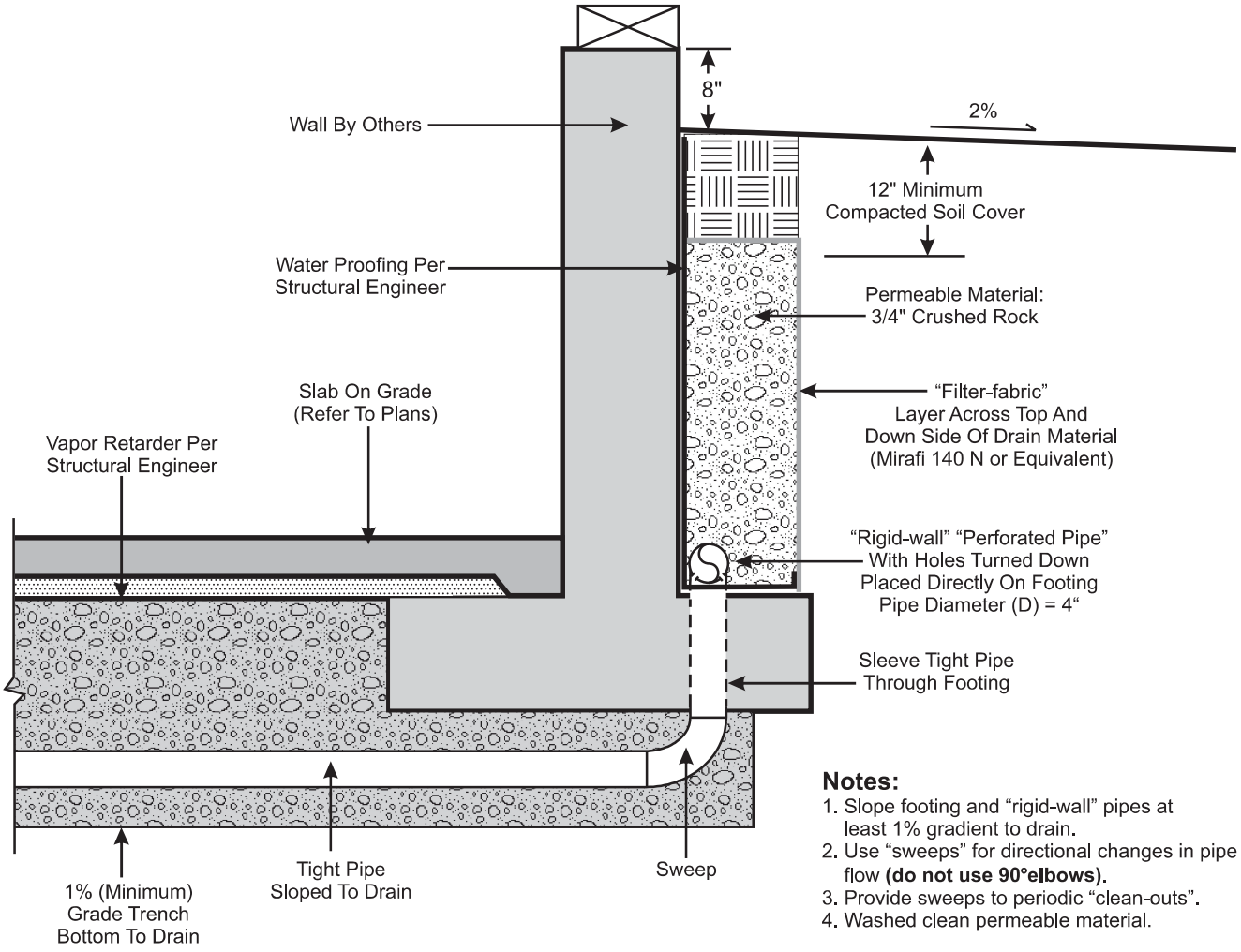


Notes:
1. Slope footing and "rigid-wall" pipes along flow line parallel to wall at least 1% gradient to drain to an appropriate outfall area away from residence.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows)**.
3. Provide periodic "clean-outs".
4. Washed clean permeable material.

Not To Scale

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E22116.001 **May 2022**	**RETAINING WALL DRAIN DETAIL** **Project 8** Penryn, California	**FIGURE** **C-2**

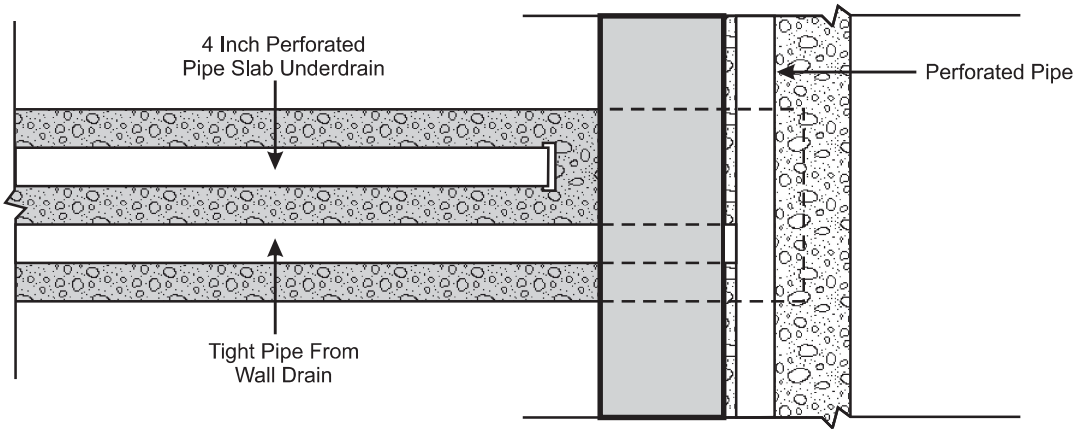
Profile View
(Typical)



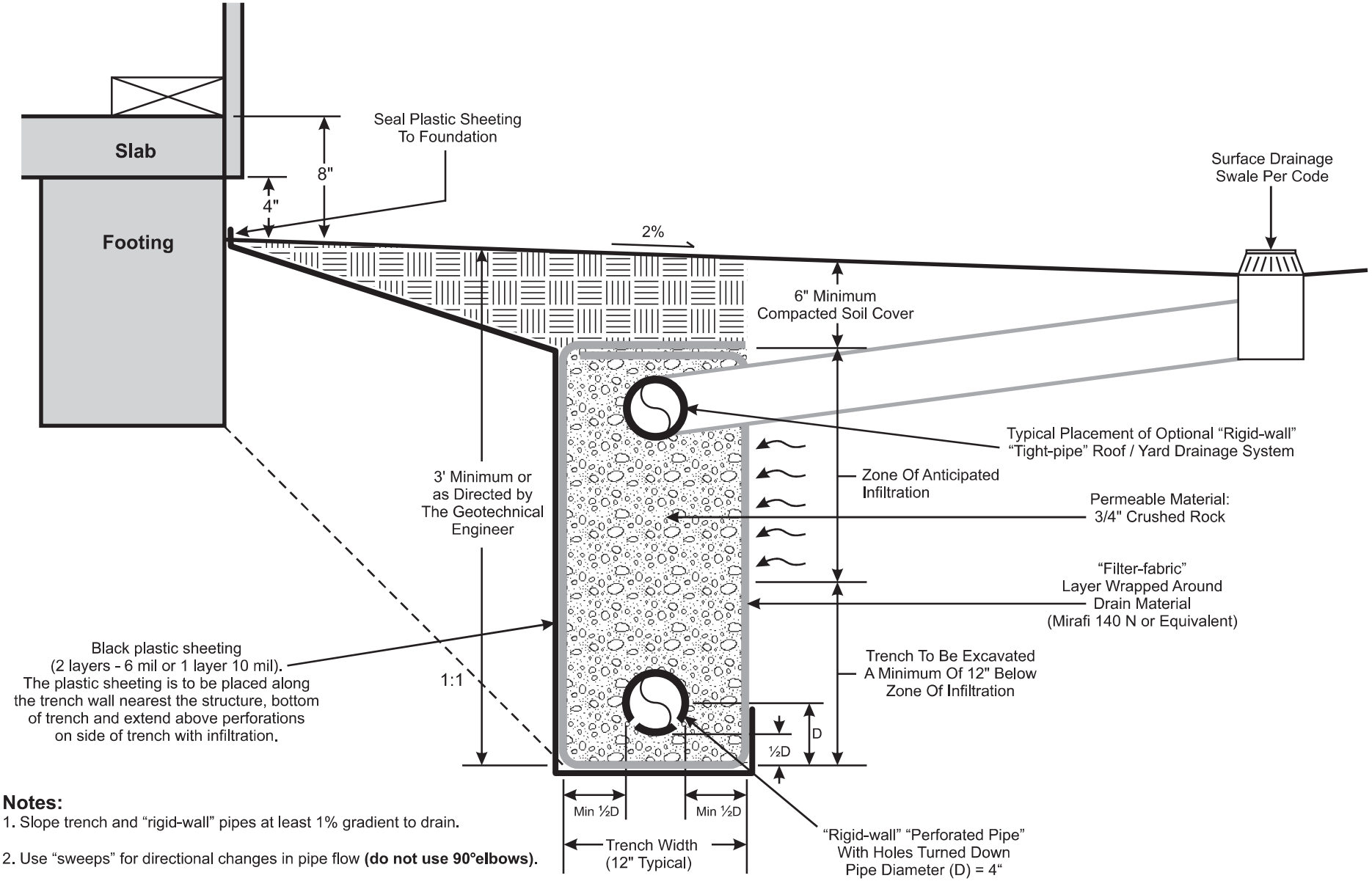
Notes:

1. Slope footing and "rigid-wall" pipes at least 1% gradient to drain.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows).**
3. Provide sweeps to periodic "clean-outs".
4. Washed clean permeable material.

Plan View
(Typical)



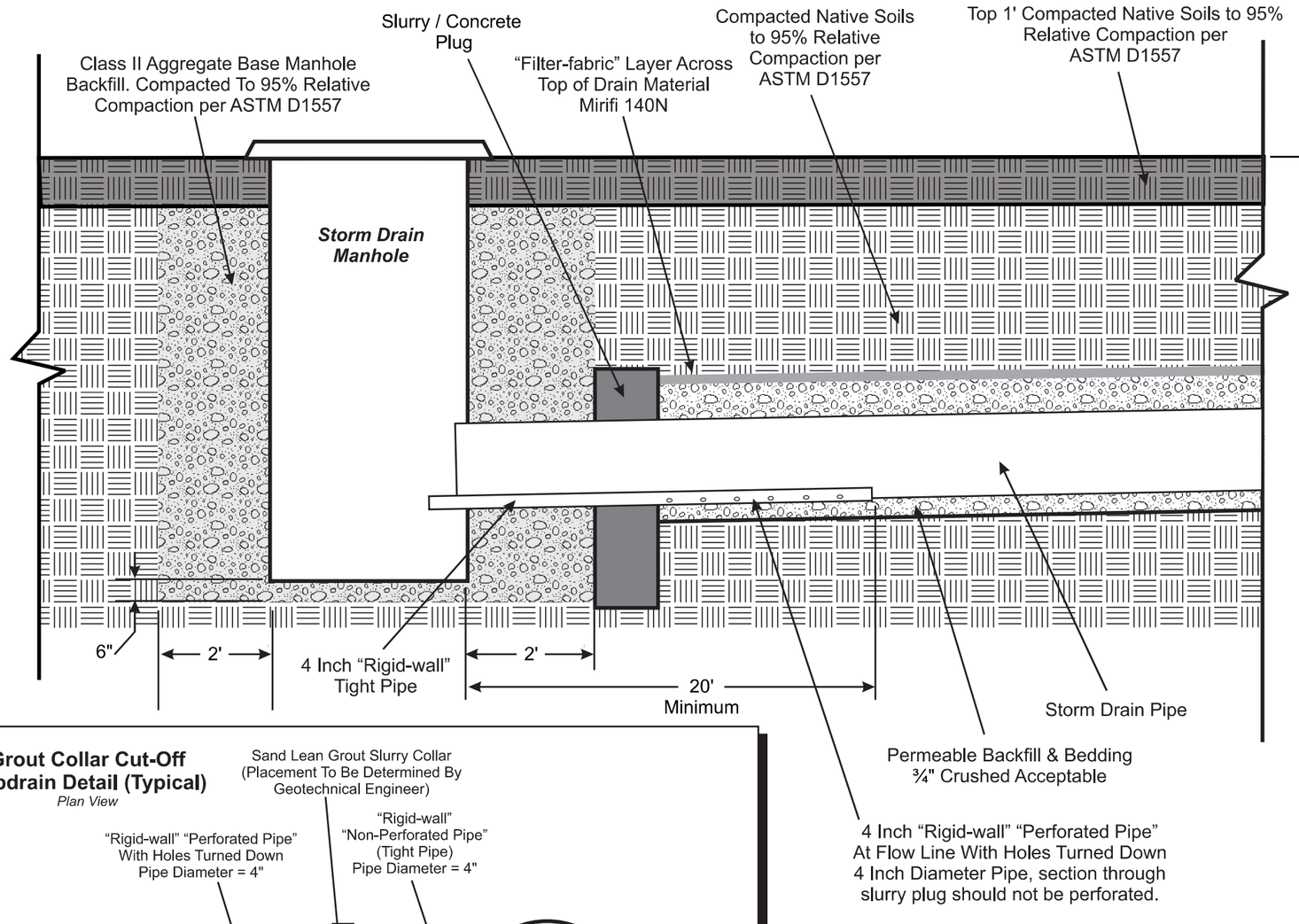
YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E22116.001 **May 2022**	**BASEMENT STEMWALL DRAIN** **Project 8** Penryn, California	**FIGURE** **C-3**

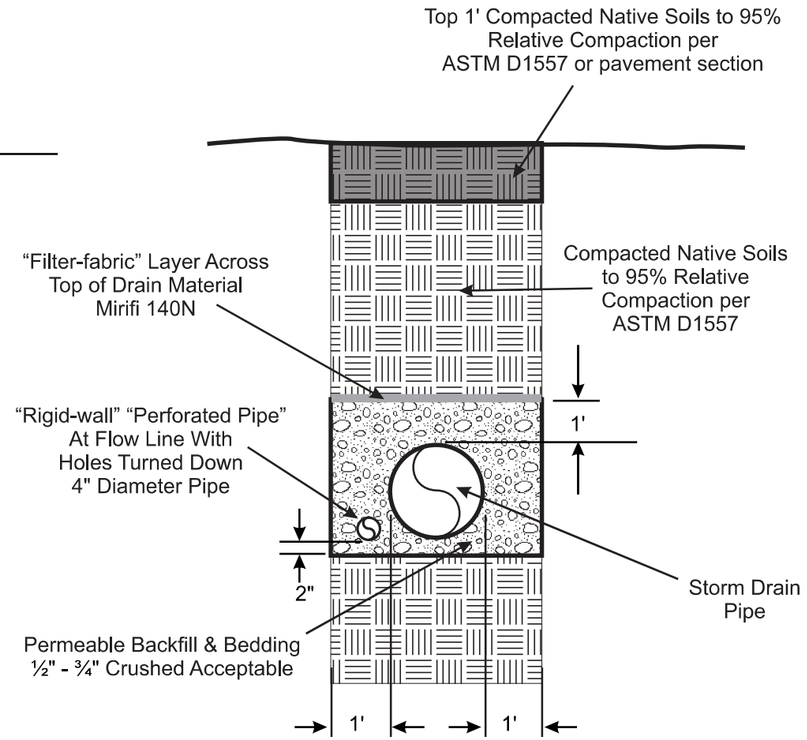


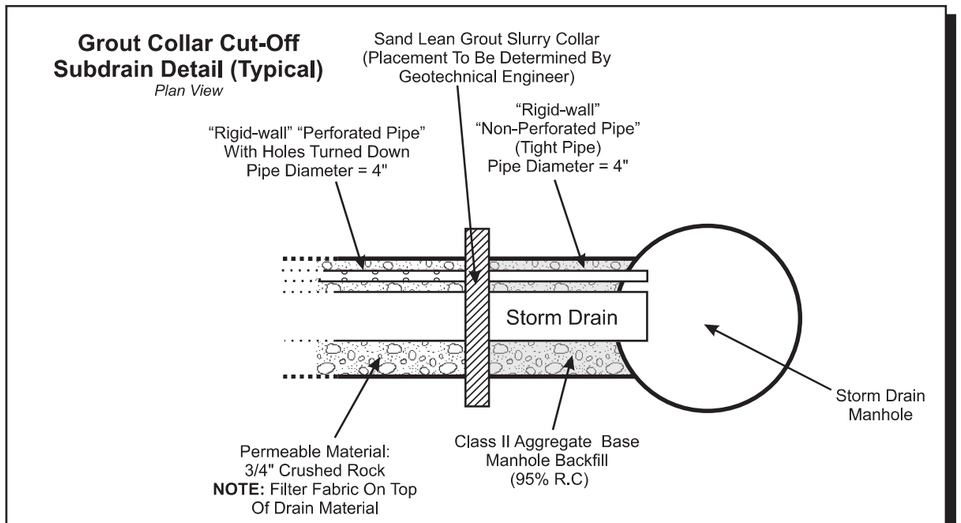
Notes:

1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain.
2. Use "sweeps" for directional changes in pipe flow **(do not use 90°elbows)**.
3. Provide sweeps to periodic "clean-outs".
4. Washed clean permeable material.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E22116.001 **May 2022**	**SUB-DRAIN DETAIL** **Project 8** Penryn, California	**FIGURE** **C-4**







Notes: *1. Slope trench and "rigid-wall" pipes at least 1% gradient to drain.*
2. Washed clean permeable material.
3. Slurry collar to extend into trench sidewalls and to top of pipe envelope.

Notes: *Slope trench and "rigid-wall" pipes at least 1% gradient to drain.*

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Project No.: E22116.001

May 2022

TYPICAL STORM DRAIN / SUB-DRAIN DETAIL

Project 8

Penryn, California

FIGURE

C-5

APPENDIX D (REFERENCE 4)

Refraction Seismic and Multichannel Analysis of Surface Waves
Investigation for Project 8 Wine Cave Project

Refraction Seismic and Multichannel Analysis of Surface Waves Investigation, at the Project 8 Wine Cave Project Site in Penryn, Placer County, California

GGSI Project No. 2022-18.01

Prepared by:

Gasch Geophysical Services, Inc.
Rancho Cordova, California 95742-6576

Submitted to:

Ms. Martha McDonnell
Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

April, 2022

GASCH GEOPHYSICAL SERVICES, INC.
WWW.GEOGASCH.COM *Since 1969*

April 19, 2022

Ms. Martha McDonnell
Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

Re: Refraction Seismic and Multichannel Analysis of Surface Waves Investigation at the Project 8 Wine Cave Project Site in Penryn, Placer County, California. GGSI Project No. 2022-18.01

Dear Ms. McDonnell,

At your request and authorization, Gasch Geophysical Services, Inc. (GGSI) has completed a refraction seismic and multichannel analysis of surface waves investigation to evaluate the characteristics of the sub-surface materials at the Project 8 Wine Cave Project Site in Penryn, Placer County, California.

Purpose

The purpose of this investigation is to determine the seismic primary wave (P-wave) for rock competency and/or excavatability and shear wave (S-wave) velocity values for rock strength and/or stiffness.

Method, Instrumentation and Software

Refraction Seismic (RS)

The RS method measures the velocity at which a seismic wave propagates through a soil or rock medium. In this case, the primary (p-wave) or compressional seismic wave was measured. Higher seismic p-wave velocities indicate material of higher density, thus quantifying the competency, or strength of the soil or rock medium, and providing an estimation of the rippability and/or excavatability of the sub-surface materials or to the depth of the underlying bedrock material.

GGSI's seismic data acquisition system was a Seistronix EX-6 Explorer which is a distributed, 24-bit digital instrument with data output to electronic media for subsequent processing. Geophones were single, 10-Hz, digital grade units manufactured by OYO Geospace Corporation. Spread cables were manufactured by Pro-Seismic Services. The energy source for this project was a sixteen pound sledge hammer with a hardwire connection for system triggering.

Refraction seismic data processing was carried out using Rayfract® version 3.36. This refraction seismic processing software utilizes Wavepath Eikonal Traveltime (WET) tomography, which models multiple signal propagation paths contributing to one first break (the Fresnel volume approach). Conventional ray tracing tomography is limited to the

modeling of just one ray path per first break. The WET inversion method is founded upon a back-projection formula for inverting velocities from travel times computed by a finite-difference solution to the Eikonal equation (Qin, et al. 1992). An Eikonal solver is used for traveltime field computation, which models diffraction in addition to refraction and transmission of acoustic waves. As a result, the velocity anomaly imaging capability is enhanced with the WET tomographic inversion method compared to conventional ray tomography. This software is developed by Intelligent Resources, Inc. of Vancouver, British Colombia, Canada.

Multichannel Analysis of Surface Waves (MASW)

The MASW method and equipment for data acquisition is the same as for the RS method with the exception of how the data is collected. MASW measures lower frequency surface waves utilizing data collected in lines segments of a chosen number of active geophones and "rolls' through the total geophone spread, collecting data from multiple off-end energy source points for each line segment. All line segments are summed to create a 2-dimentional shear wave velocity tomographic profile.

Shear wave velocity profiles are generated by performing a spectral analysis of a 2-D dispersion curve, which correlates slowness (inverse of velocity, symbolized as p) and frequency (f) of ambient Rayleigh waves at a site. This information is then used to delineate the lowest velocity envelope of the fundamental mode on the p-f dispersion, which can further be used to back-calculate a 2-D shear-wave velocity tomographic model. Since shear modulus is directly associated to a materials stiffness, the MASW data can provide valuable data for design engineers.

The MASW data were processed by Dr. Satish Pullammanappallil of SubTerraSeis, LLC in Reno, Nevada using Geogiga's Surface Plus version 9.3, a software package developed in Calgary, Alberta, Canada by the Geogiga Technology Corporation.

Data Acquisition Parameters

Two RS lines and one MASW data set was acquired during this investigation. These lines were acquired at locations suggested by Youngdahl Consulting Group personnel and slightly adjusted in the field to allow for safe and efficient data collection. RS Line 1 and the MASW Line were acquired at the same location and were acquired with 48 geophone stations spaced at 10-foot intervals. RS Line 2 was acquired with 24 geophone stations spaced at 20-foot intervals. Energy source points on RS Line 1 were located between every fifth geophone station, as well as off the ends of the line. RS Line 2 had energy source points located between every third geophone station as well as off the ends of the line. The MASW Line employed 48 total geophone channels and data was collected in seven, 24-channel segments with energy source points located at 20, 40 and 60 feet off the ends of each segment. A total of 990 lineal feet of RS data and 580 lineal feet of MASW data was collected for this investigation. Collection of the field data was carried out on April 12th, 2022. The field crew consisted of Professional Geophysicist Kent Gasch and geophysical technician Brian Pearson. The location of the lines are presented on Figure 2.

Primary Wave Seismic Velocities

Generally, seismic p-wave velocities less than 3,000 ft/s indicate native soil, fill material or highly weathered and/or decomposed rock, while velocities in excess of 10,000 ft/s indicate fresh (essentially non-weathered) rock. Seismic velocities between these two values typically indicate rock with varying degrees of weathering and/or fracturing. Consolidation and cementation, as well as, fracture spacing and density also affect the measured seismic velocities. Low to moderate velocities may indicate compacted soil, moderately weathered rock or loosely consolidated sediment such as gravel, sand and silt. Saturated sediment below the water table characteristically displays seismic velocities near or slightly above 5,000 ft/s.

Extremes in seismic velocities may range from below 1,000 ft/s to over 20,000 ft/s. Very low seismic velocities usually indicate highly weathered or poorly compacted material, either natural or man-made. Extremely high velocities are rare in the near-surface, and only possible in certain types of rock. Rock velocities are dependent on the physical condition of the rock masses evaluated, as a result, seismic p-wave velocities are related to rock hardness, fracture density and sediment consolidation, saturation and cementation.

Rippability

Rippability is dependent on the physical condition of the rock masses to be excavated. In addition to rock type and degree of weathering, structural features in the rock such as bedding planes, cleavage planes, joints, fractures, consolidation and shear zones also influence rippability. Rock masses tend to be more easily ripped if they have well defined, closely spaced fractures, joints, or other planes of weakness. Massive rock bodies which lack discontinuities may allow for slow and difficult ripping or refusal, even where partially weathered, and may require blasting to break the rock for efficient removal.

The association between the seismic velocity of any given earth material and its rippability varies greatly from one type of earth-moving equipment to another. For example, although a large track laying dozer with a single ripper tooth can sometimes rip material with seismic velocities in excess of 10,000 ft/s, GGSI has experienced a limiting (refusal) velocity for large excavators to range from 3,500 ft/s to 4,500 ft/s, and a standard backhoe may meet refusal at seismic velocities as low as 2,000 ft/s. Even though low seismic velocities in any rock type indicate probable rippability; if the fractures, bedding and/or joints do not allow tooth penetration, the material still may not be ripped efficiently, and in some cases, drilling and blasting may be required to induce sufficient fracturing to allow for excavation. Ultimately, the relationship between seismic velocity and rippability is dependent on both: site conditions *and* equipment and/or operator ability.

Seismic p-wave velocities are related to both rock hardness and fracture density. Rippability has been empirically correlated to refraction seismic velocities by Caterpillar Inc., as displayed on Figure 6 for a CAT D10T2 (Caterpillar Performance Handbook, Edition 49, September, 2019). According to this chart, igneous rocks, in this case granitic rocks, become marginally rippable near 7,300 ft/s and non-rippable at around 8,500 ft/s for a D10T2 dozer with multi or single shank No. 10 ripper. These estimations are based on the

published values for igneous rocks on the CAT chart; however, site geology and topography may cause some variations of these values.

The Caterpillar Chart of Ripper Performance should be considered as being only one indicator of rippability. Ripper tooth penetration is the key to successful ripping, regardless of seismic velocity. This is particularly true in finer-grained, homogeneous materials and in tightly cemented formations. Ripping success may ultimately be determined by the operator finding the proper combination of factors, such as: number of shanks used, length and depth of shank, tooth angle, direction of travel, and use of throttle.

Findings

Refraction Seismic

The results of the refraction seismic investigation are summarized by Figures 3 and 4. These seismic velocity sections, which were created through the inversion process, have very low error and provide a high degree of lateral definition of the seismic velocity horizons found beneath each line. A color-coded seismic velocity tomographic cross-section of the subsurface has been generated for each RS line, where cool colors (blues) indicate lower seismic velocities and warm colors (reds, purple) indicate higher velocities. Color scaling of this seismic velocity section is based on the range of seismic velocity values calculated. The seismic velocity sections have been scaled from 1,500 ft/s to 18,000 ft/s for the velocity window. Horizontal and vertical axes have been scaled to 40 feet per inch on both axes. Examination of these velocity sections provides a visual depiction of the variation in seismic velocities beneath each RS line.

RS Line 1 (Figure 3)

RS Line 1 is located in the northeastern central portion of the project site, is oriented approximately south-southwest to north-northeast and spans a length of 490 lineal feet (see Figure 2). Seismic velocities at this location show a moderate gradation of from the low and moderate velocities (1,500 ft/s to 4,000 ft/s) at the surface to a depths ranging from approximately 30 feet below ground surface (bgs) at the south-southwestern end of the line and near 80 feet bgs at the highest elevation of the line near the tie with Line 2 and then dropping to near 90 feet bgs on the north-northeastern end of the line. The velocities in this horizon (surface to the ~4,000 ft/s horizon) suggest native soils, highly weathered and/or decomposed rock grading to slightly less fractured and/or weathered rock.

Below the moderate velocity horizon (~4,000 ft/s), velocities increase at a faster rate, with marginally rippable material (velocities of ~7,300 ft/s) at depths of 90 to 160 feet bgs and non-rippable material of >8,500 ft/s at depths near 105 to 160 feet bgs. Material in the 4,000 to 7,300 ft/s horizon suggest rock with moderate weathering and/or fracturing grading to rock with minimal weathering and/or fracturing.

According to the CAT ripper performance chart, velocities greater than ~7,300 ft/s will be marginally rippable with a D10T2 dozer with multi or single shank No. 10 ripper and non-

rippable at 8,500 ft/s. Measured velocities suggest rippable material to a depths of approximately 90 to 160 feet below this line.

RS Line 2 (Figure 4)

This line is also located in the northeastern central portion of the project site. This line is oriented approximately southwest to northeast with a total length of 500 lineal feet (see Figure 2). Velocities below this line grade at a moderate rate from surface to the 4,000 ft/s velocity contour. The low to moderate velocity horizon of 1,500 ft/s to 4,000 ft/s is shown at the ground surface and extending to depths of 70 to 105 feet bgs. This velocity horizon suggest native soils, highly weathered and/or decomposed rock grading to less fractured and/or weathered rock.

Below this low to moderate velocity horizon, velocities grade at a faster rate to over 15,000 ft/s at the maximum depth of exploration for this line. The marginally rippable horizon (velocities of ~7,300+ ft/s) is found at depths of approximately 125 to 150 feet bgs and non-rippable material of >8,500+ ft/s at depths near 140 to 150 feet bgs. Material in the 4,000 to 7,300 ft/s horizon suggest rock with moderate weathering and/or fracturing grading to rock with minimal weathering and/or fracturing.

Multichannel Analysis of Surface Waves

The results of the multichannel analysis of surface waves investigation is summarized by Figure 5. This shear wave seismic velocity tomography section, which was created through the inversion process, has very low error and provides a high degree of lateral definition of the seismic velocity horizons found beneath the line. A color-coded seismic velocity cross-section of the subsurface has been generated for this MASW line, where cool colors (blues) indicate lower seismic velocities and warm colors (reds, purple) indicate higher velocities. Color scaling of this seismic velocity section is based on the range of seismic velocity values calculated. The seismic velocity section has been scaled from 500 ft/s to 4,000 ft/s for the velocity window. Horizontal and vertical axes have been scaled to 40 feet per inch on both axes. Examination of this velocity section provides a visual depiction of the variation in shear wave seismic velocities beneath the line.

MASW Line 1 (Figure 5)

MASW Line 1 is located in the northeastern central portion of the project site, is oriented approximately south-southwest to north-northeast and is at the same location as RS Line 1 (see Figure 2). This line measured shear wave velocities from surface to depths greater than 100 feet bgs. Low to moderate shear wave velocities (velocities of 900 ft/s to 1,900 ft/s) measured beneath this line grade at a moderate rate extending from ground surface to approximately 80 feet bgs on the south-southwest end of the line to over 110 feet bgs on the north-northeast end of the line. These velocities suggest native soil, fill material or highly weathered and/or decomposed rock grading to less fractured and/or weathered rock at depths greater than 100 feet bgs.

Beneath this low to moderate velocity horizon, the velocity gradation continues at a faster rate to the maximum depth of exploration, with a maximum measured shear wave velocity of just over 3,700 ft/s at a depth of approximately 150 feet bgs. These higher velocities are indicative of rock with minor weathering and/or fracturing to slightly weathered and/or fractured material or fractured rock with moderate consolidation, grading to fresh rock with few fractures at shear wave velocities greater than ~2,500 ft/s.

Summary

Refraction Seismic

This refraction seismic investigation provides a good sampling of the subsurface conditions at the Project 8 Wine Cave Project Site. This refraction seismic investigation revealed a high degree of variation in the calculated seismic velocities of the subsurface materials, with maximum seismic velocity values greater than 15,000 ft/s measured on both RS Lines.

Low velocity material was encountered in the near surface on both RS lines, which suggests native soil, fill material or highly weathered and/or decomposed rock grading to moderately weathered/fractured rock and/or highly compacted native soil or fill. Both RS Lines show a low to moderate velocity section of material from ground surface to varying depths.

Moderately-high to very high velocities were also measured on each line with velocities of ~7,000 ft/s and greater at depths ranging from approximately 90 to 160 feet bgs on Line 1 and 125 to 150 feet bgs on Line 2. These high velocities are indicative of slightly weathered material or fractured rock with moderate consolidation grading to fresh rock with few to no fractures.

Displayed on Figure 6 is the Caterpillar Performance chart for a CAT D10T2 (Caterpillar Performance Handbook, Edition 49, September, 2019). According to this chart, igneous rock becomes marginally rippable near 7,300 ft/s and non-rippable at 8,500 ft/s for a D10T2 dozer with a single shank or multi-shank No. 10 ripper.

In general, rippability with a CAT D10T2 dozer (or equivalent) with a single shank or multi-shank No. 10 ripper should not be problematic to the depths noted above for each RS Line; however, if the rock encountered is massive in nature and/or depending on the maximum depth of excavation, progress will likely be slower as zones of higher velocity material are encountered. In such instances, alternative means of excavation, such as drilling and blasting, may be necessary to further the excavations beyond the 8,000 ft/s velocity horizon.

Multichannel Analysis of Surface Waves

The MASW shear wave model provides, two-dimensional shear-wave velocities to depths of over 100 feet bgs. Shear wave velocities have been calculated for the profile showing a wide range of velocities from surface to 80 to 110 feet bgs which suggest rock with varying degrees of weathering and fracturing. Below this horizon, velocities grade quickly to higher shear wave values which are indicative of rock with minor to slight to no fracturing.

Warranty and Limitations

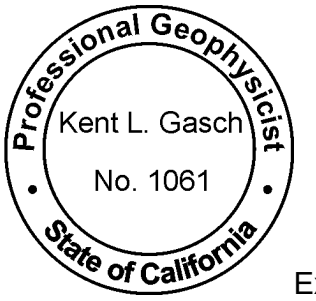
Gasch Geophysical Services, Inc. has performed these services in a manner which is consistent with standards of the profession. Site conditions can cause some variations of the calculated seismic velocities. Refraction seismic velocities assume that velocities increase with depth; therefore, a lower seismic velocity layer beneath a higher seismic velocity layer will not be resolved. No guarantee, with respect to the results and performance of services or products delivered for this project, is implied or expressed by Gasch Geophysical Services, Inc.

We trust that this is the information you require; however, should you have comments or questions, please contact our Rancho Cordova office at your convenience. Thank you for this opportunity to again be of service.

Sincerely,

GASCH GEOPHYSICAL SERVICES, INC.

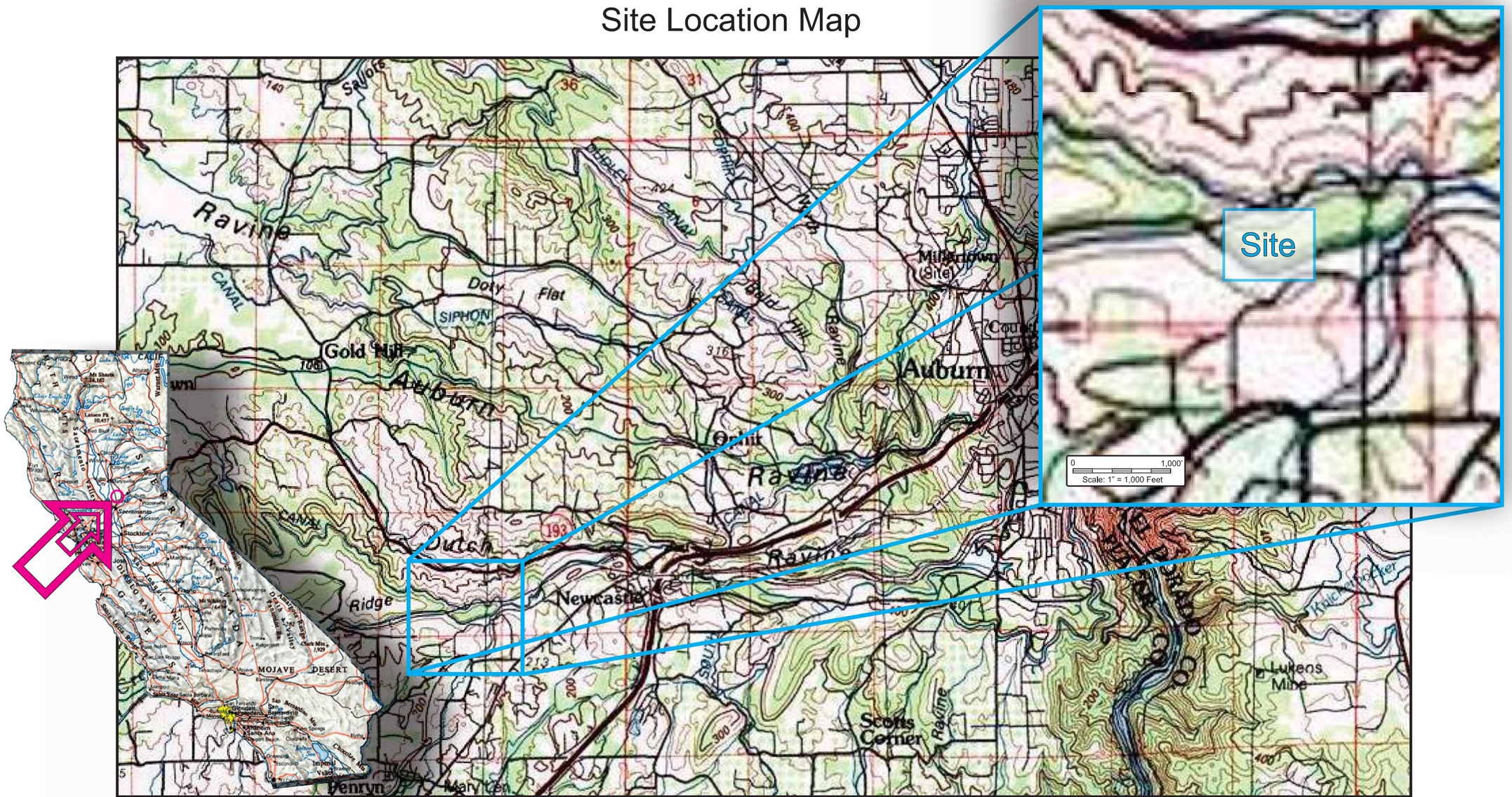




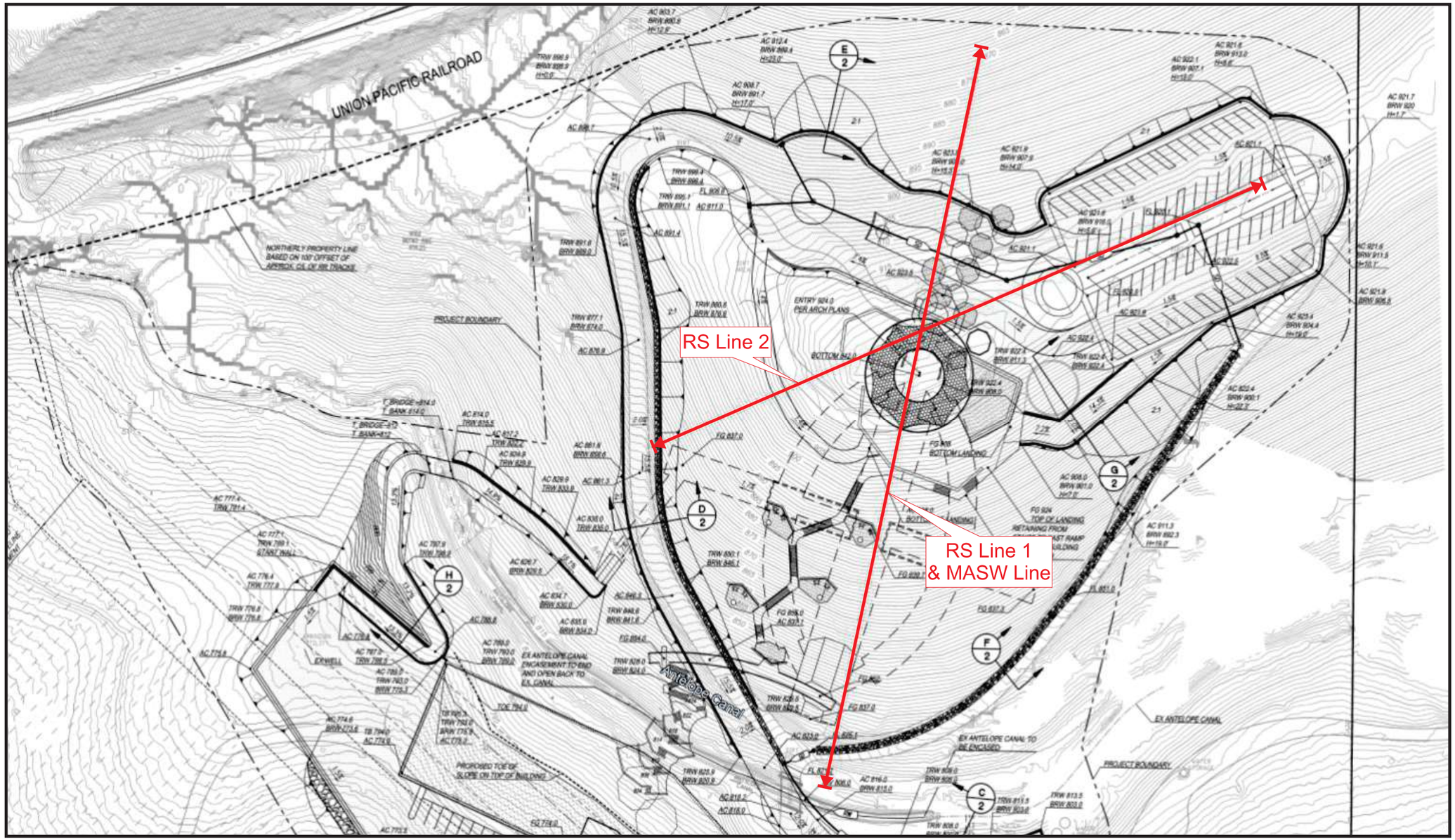
Expires 12/31/2023

Kent L. Gasch
Professional Geophysicist #1061
Blasting Consultant

Site Location Map


Site
0
1,000'
Scale: 1" = 1,000 Feet
Ravine
CANAL
Doty
Flat
SIPHON
Gold Hill
Auburn
Dutch
Ridge
Newcastle
Scotts
Corner
Lukens
Mine
Millertown
(Site)
Orrit
Ravine
Reid Hill
Ravine
Ravine
Ravine

Seismic Line Location Map



Base Map Courtesy of MacKay & Somps, dated 2/22/21

N

W E

S

0’ 40’ 80’ 160’

Scale: 1” = 80’

Figure 2

G2S Consultants in Geophysics for the Engineering, Groundwater, Oil & Gas and Blasting Industries

Gasch Geophysical Services, Inc. *Since 1969*

www.geogasch.com

3174 Luyung Drive, Building #2
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Seismic Investigation:
Project 8 Wine Cave Project Site

Prepared for: ***Youngdahl Consulting Group***

Project Number: 2022-18.01 ***Date:*** April, 2022

P-Wave Seismic Velocity Section • RS Line 1

South-southwest

North-northeast

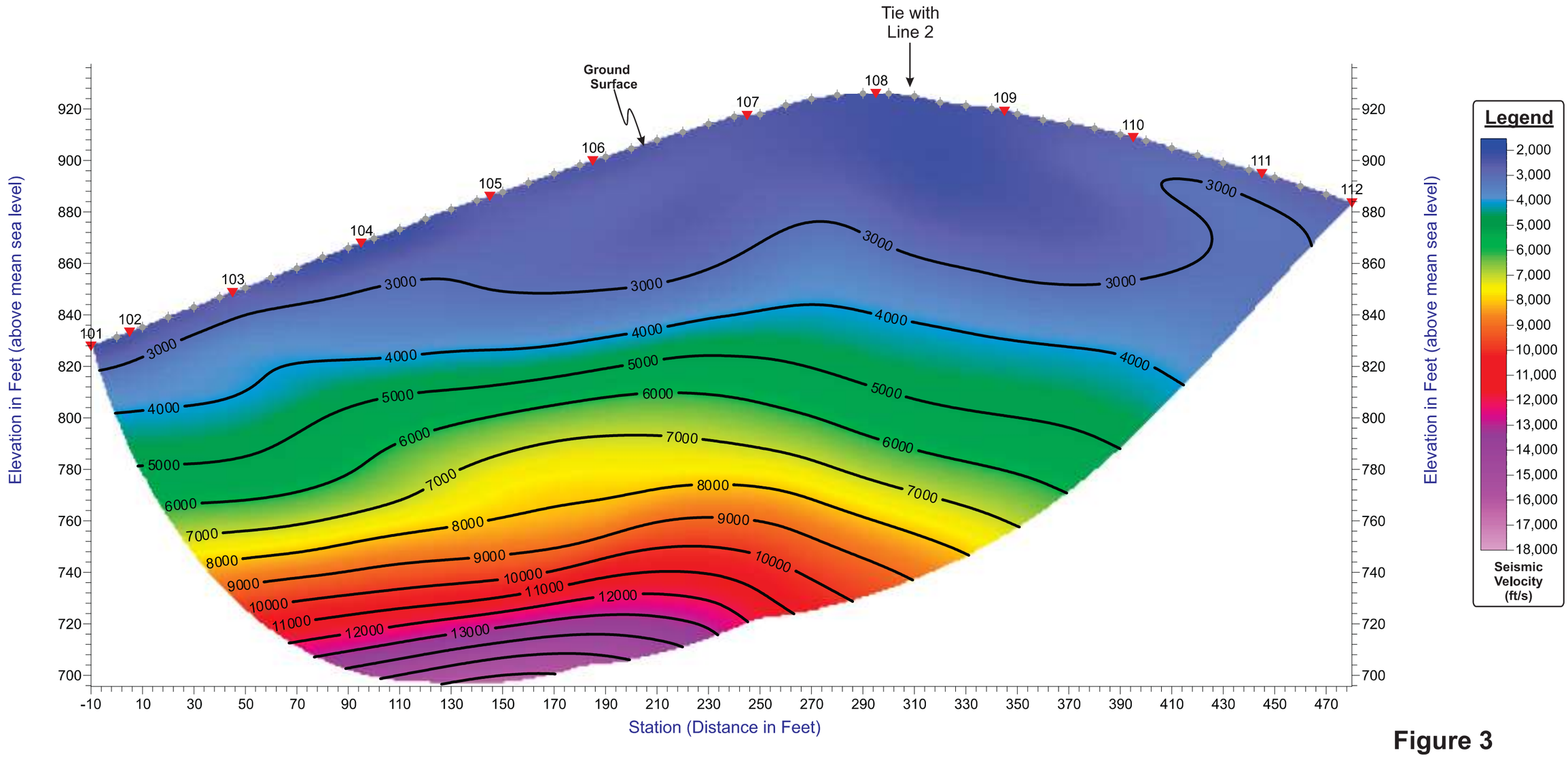


Figure 3

Scale:
Horizontal: 1” = 40’
Vertical: 1” = 40’

Legend

Geophone Station

101 Energy Source Locations

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Seismic Investigation:
Project 8 Wine Cave Project Site

Prepared for: ***Youngdahl Consulting Group***

Project Number: 2022-18.01 ***Date:*** April, 2022

P-Wave Seismic Velocity Section • RS Line 2

Southwest

Northeast

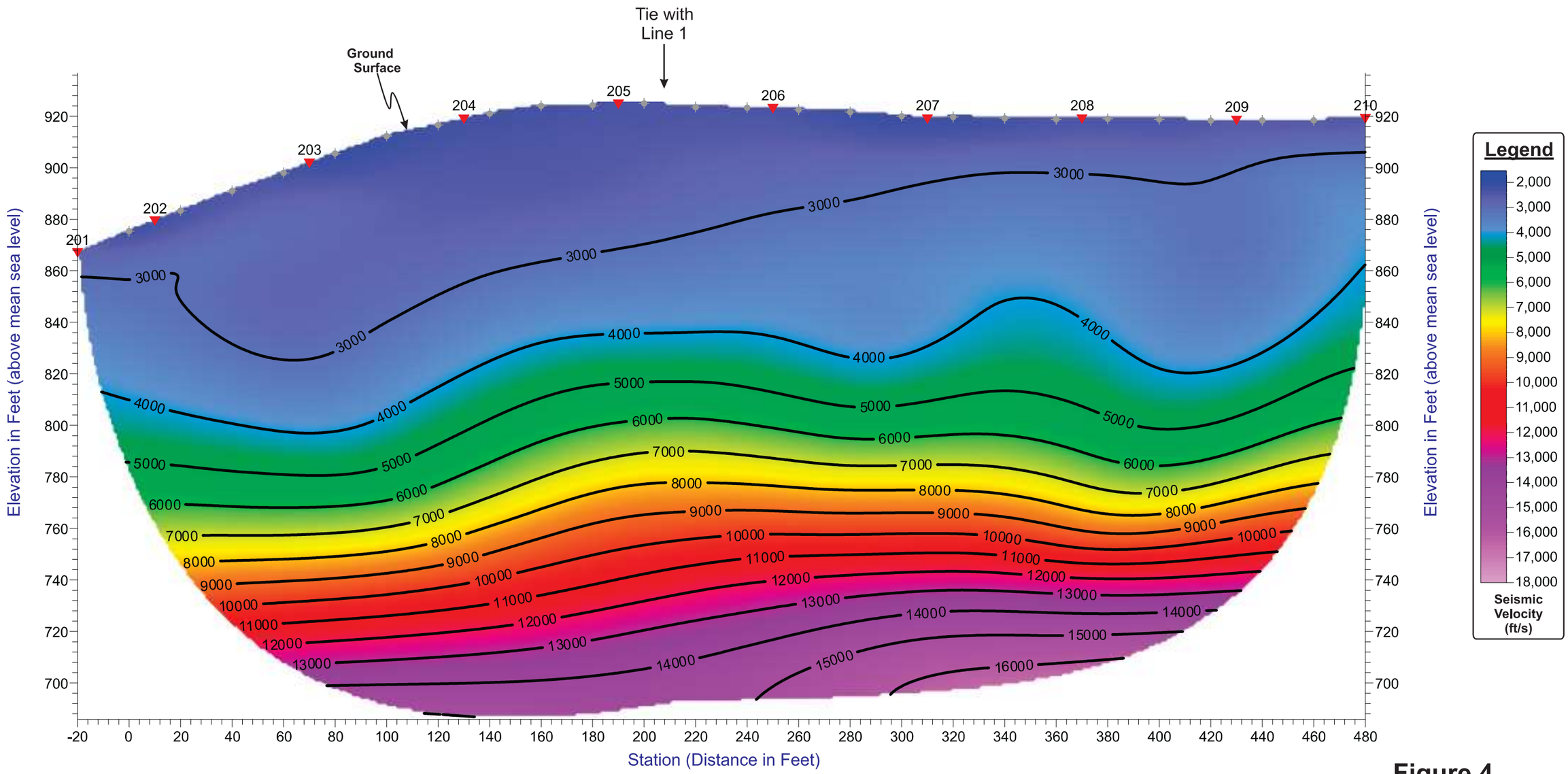


Figure 4

Scale:
Horizontal: 1” = 40’
Vertical: 1” = 40’

Legend
- Geophone Station
- 201 Energy Source Locations

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Seismic Investigation:
Project 8 Wine Cave Project Site

Prepared for: ***Youngdahl Consulting Group***

Project Number: 2022-18.01 ***Date:*** April, 2022

Shear Wave Seismic Velocity Section • MASW Line 1

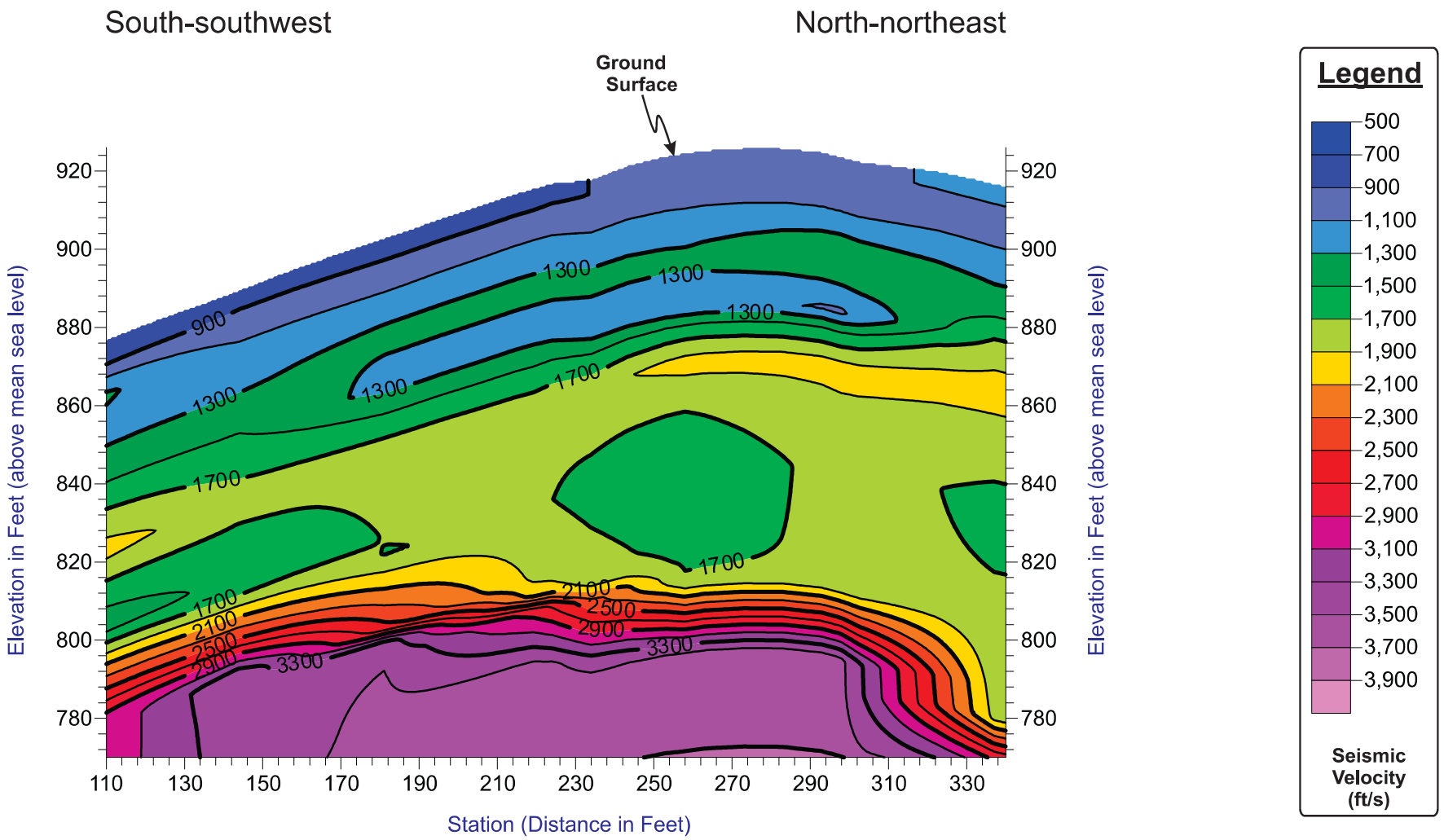


Figure 5

Scale:
Horizontal: 1” = 40’
Vertical: 1” = 40’

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Seismic Investigation:
Project 8 Wine Cave Project Site

Prepared for: ***Youngdahl Consulting Group***

Project Number: 2022-18.01 ***Date:*** April, 2022

Caterpillar D10T2 Ripper Performance Chart*

D10T2

Multi or Single Shank No. 10 Ripper
Estimated by Seismic Wave Velocities

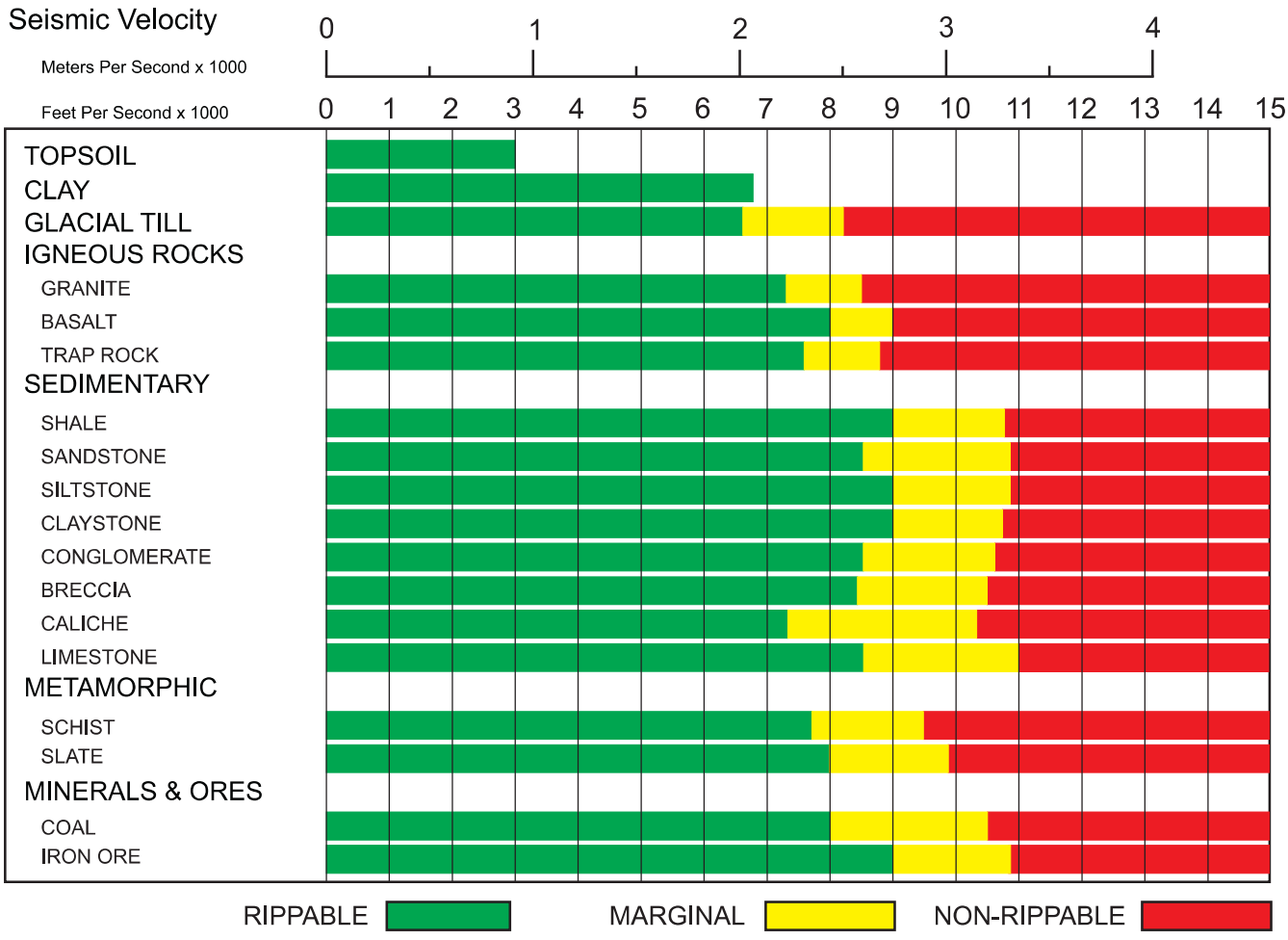


Figure 6

* Based on the Caterpillar Performance Handbook Edition 49 - September, 2019

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Seismic Investigation:
Project 8 Wine Cave Project Site

Prepared for: Youngdahl Consulting Group

Project Number: 2022-18.01 **Date:** April, 2022

Appendix I

Project 8

Geostructural Investigation – Preliminary Data Report – Wine Cave

7615 Callison Road, Penryn, California
March 22, 2022

Prepared for:
Mike Fournier
Building Engineering & Maintenance, Inc
4780 Rocklin Road
Rocklin, CA 95677

Prepared by:
Provost & Pritchard Consulting Group
Sonora, California
Job No. 3963-22-001

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Appendix A – Boring Logs and Core Photos
Appendix B – Laboratory Test Reports

Project 8
Geostructural Investigation
Preliminary Data Report – Wine Cave
7615 Callison Road, Penryn, California
March 22, 2022

1.0 INTRODUCTION

This preliminary report presents the geostructural investigation exploration and data compilation performed by Provost & Pritchard Consulting Group (P&P) for the proposed retaining walls, wine cave and elevator shaft for the Project 8 winery project. The site is located at 7615 Callison Road, in Penryn, California. Figure 1 shows the approximate site location.

The scope of work was presented in the proposal prepared by Condor Earth (Condor) dated December 10, 2021. Condor assigned the contracts to P&P effective January 3, 2022 and P&P performed the surface and subsurface investigation per the original scope stated in the December 10, 2021 Proposal. The purpose of this work was to:

- Provide geologic and geostructural engineering site and subsurface data.
- Present investigation findings in a preliminary data report to be used during design consultation and future design phases.

Section 2.0 describes the proposed improvements. The project team will use the information in this report for design and construction for the shotcrete walls, tunnels and shaft.

2.0 PROJECT DESCRIPTION

Figure 2 shows the proposed improvements and site topography. P&P understands that slight changes have been made to the tunnel location and will update figures once updated files are received. Through our discussions with you, and review of the most recent files provided by you, we understand that the project will include construction of a new underground winery cave, elevator shaft and shotcrete retaining walls supporting the cuts for the cave portals. Additional site improvements include construction of buildings, roadways, walkways and parking lots. P&P's investigation included exploration for the wine cave, elevator shaft and retaining walls.

P&P understands that the wine cave will have two portal areas and one stairway egress. Cuts at the portal areas will be supported by permanent shotcrete walls and temporary shoring for near-surface cut-and-cover areas. Tunnels will be arranged (plan view) in a "T" style with an octagon shaped outer tunnel. Tunnels will be up to 32 feet wide. An elevator shaft will extend from the tunnels up to a proposed winery/hospitality building located at the top of the hill.

3.0 SCOPE OF SERVICES

The scope of services for the Task 1 – Site ad Subsurface Investigation and Reporting was presented in the Condor Proposal dated December 10, 2021. P&P and our subconsultant (RGH) performed the work. The scope included researching references regarding site geology, observing, and evaluating pertinent site conditions (site reconnaissance and geologic mapping),

performing a subsurface investigation, which included excavating borings, laboratory testing and preparation of this report, which includes the following:

- Vicinity map
- Site plan showing the stie topography, proposed tunnel and portal and approximate boring locations
- Boring logs
- Laboratory test reports
- Project description
- Description of site geology
- Discussion of general surface and subsurface conditions

4.0 SITE AND SUBSURFACE INVESTIGATION

P&P's site investigation consisted of observing, documenting and evaluating geologic and geostructural engineering aspects of the ground surface. P&P and our subconsultant investigated subsurface conditions by drilling five vertical borings. Figure 2 shows the approximate boring locations and Appendix A contains the boring logs and core photographs. Section 5.0 presents description of site conditions and Section 8.0 presents the description of subsurface conditions. P&P's subconsultant observed the borehole drilling and logged the conditions encountered along with other pertinent data. The soil was classified using the Unified Soil Classification System and the visual-manual procedure, and the engineering properties of there rock were characterized using the rock property terms presented in Appendix A. The rock quality designation (RQD) of each core run was measured and logged.

Taber Drilling (Taber) drilled the borings with a track-mounted CME-55 drill rig with auger and HQ-sized rock coring equipment over multiple and consecutive working days. For all holes, the upper roughly 10 feet were sampled using a split-spoon sampler driven by a 140-pound automatic hammer falling 30 inches. The core runs were about 5 feet long, and continuous rock cores were recovered from each hole and were visually classified and logged concurrently with drilling activities. RGH placed the retrieved core in boxes.

RGH checked the drilling fluids and groundwater conditions in the borings following drilling. Taber immediately backfilled borings B-2 through B-5 with lean cement slurry. A piezometer to measure groundwater level and ground temperature monitoring was installed in MW-1.

P&P delivered the core samples to our offices for further examination and sample selection for laboratory tests. We delivered selected samples to out subcontracted laboratories. The laboratories performed the tests that follow:

- Index properties (liquid and plastic limit)
- Sieve analysis
- Triaxial shear tests
- Corrosivity

Appendix B contains the laboratory test reports.

5.0 SITE CONDITIONS

Figure 2 shows the pertinent aspects of site conditions. The area of proposed improvements is undeveloped except for narrow dirt roads leading to the top of the hill. The site consists of moderately steep grassy slopes with occasionally densely spaced oak trees. P&P observed no indication of slope instabilities such as landslides, sloughing, tension cracks or hummocky terrain on the site's ground surface.

6.0 SITE GEOLOGY

The site is located in the western part of the Sierra Nevada physiographic province of California. This province is roughly 400 miles long and consists of high, rugged scarps on the eastern margin contrasting gentle western slopes that disappear under the Great Valley roughly to the west. The geology of the area is complex with a variety of geologic structures and rock types. Deep river canyons are cut into the western slopes.

Figure 3, Geologic Map, shows that the underlying rock at the project site is Mesozoic Granitic Rocks. Rocks in this formation are dominated by granite, quartz monzonite, granodiorite and quartz diorite.

7.0 EARTHQUAKE FAULTS

Figure 4 shows the approximate site location on a map showing earthquake faults within about 60 miles of the site. The faults are grouped as "Historic" (evidence of movement over the last 150 years), "Latest Quaternary" (evidence of movement over the last approximately 150 to 15,000 years), "Late Quaternary" (evidence of movement over the last approximately 15,000 to 130,000 years), and "Middle and Later Quaternary" (evidence of movement over the last approximately 130,000 to 750,000 years) and "Undifferentiated Quaternary" (evidence of movement over the last 750,000 to 1.6 million years). The fault locations are from the USGS Quaternary Faults and Fold Database of the United States (USGS, 2022). No known faults traverse the site.

8.0 SUBSURFACE CONDITIONS

The borings encountered a 1 to 3 feet colluvium over weathered rock. The encountered colluvium consisted of completely weathered bedrock to a soft, red-brown clayey sand with medium to coarse grained sand that is damp with roots and rootlets.

The rock encountered below the colluvium consisted primarily of decomposed diorite to quartz diorite and has the following engineering properties:

- Severely weathered in the upper 10 feet transitioning to highly weathered with depth
- Occasional zones of closely spaced fractures, otherwise moderately to very little fractured
- Fractures tend to be slightly rough to rough, tight to open with occasional clay infill and oxide staining
- Intact/massive structure
- Low hardness, locally moderately hard
- Very weak to weak

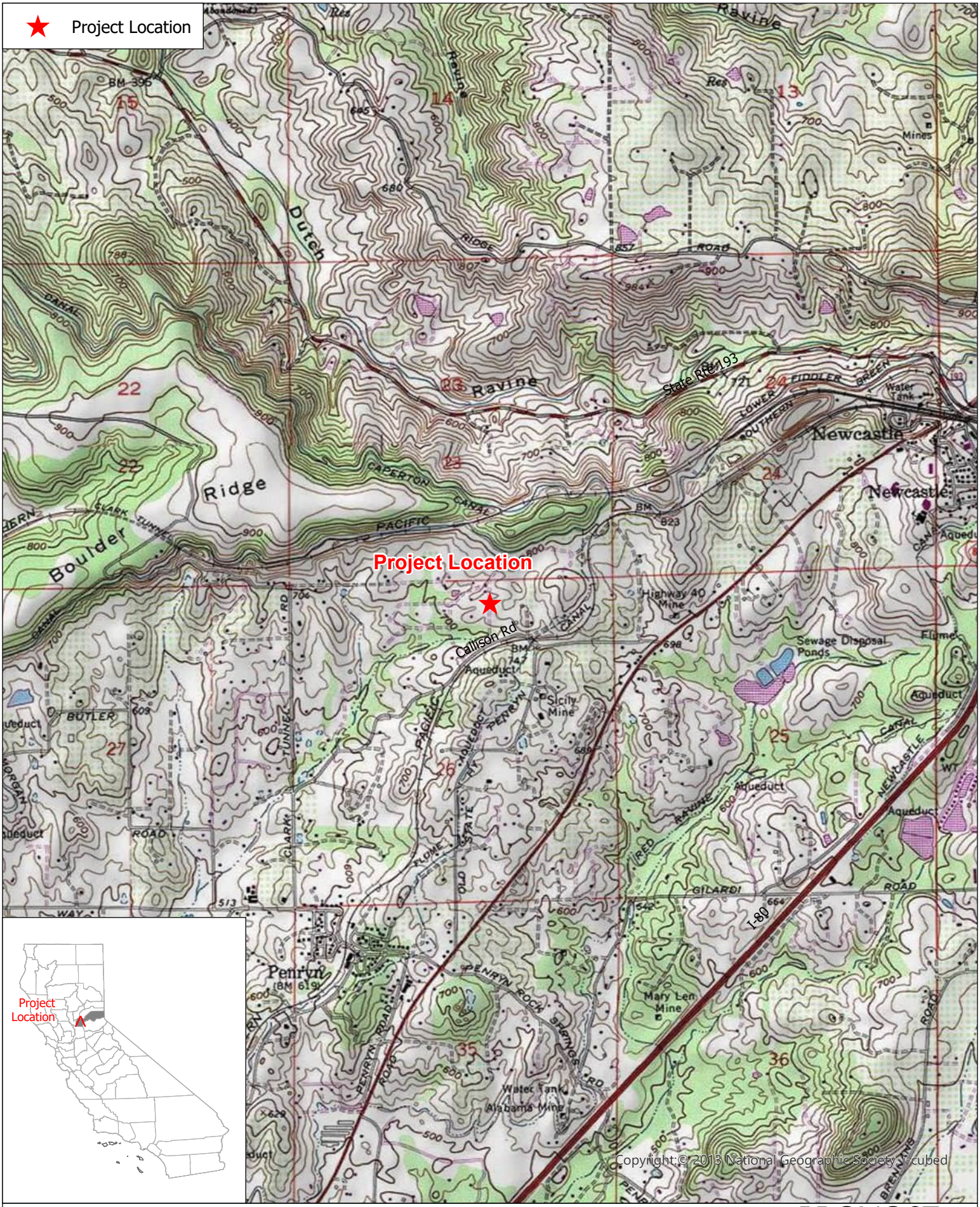
9.0 GROUND TEMPERATURE AND GROUNDWATER MEASUREMENTS

Groundwater conditions were observed at the time of drilling. No free groundwater was encountered in any of the borings. P&P plans to return to the site and measure groundwater levels and ground temperature in the piezometer installed in MW-1, under Task 2 of the December 10, 2021 Proposal.

CLOSURE

Please contact P&P if you have questions.

Figures



0 1,000 2,000
Feet

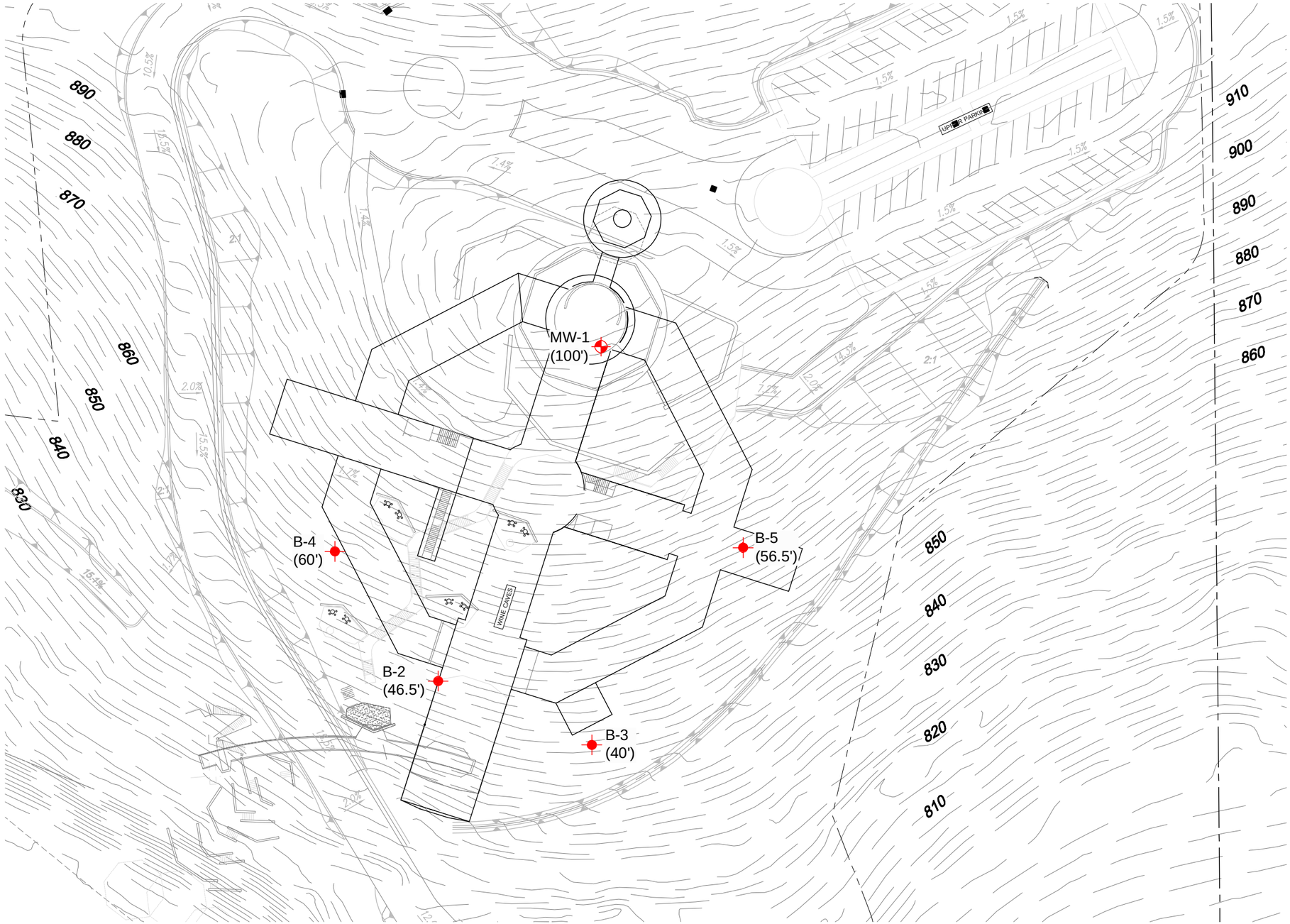
Regional Project Vicinity

Project 8 Wine Cave- Placer County, CA

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FIGURE 1

3/18/2022 G:\Building Engineering and Maintenance Inc-3963\0396322001-Project 8 Wine Cave\400 GIS\Map\Project_8_Wine_Cave.aprx



SCALE IN FEET

0 30 60 120

LEGEND

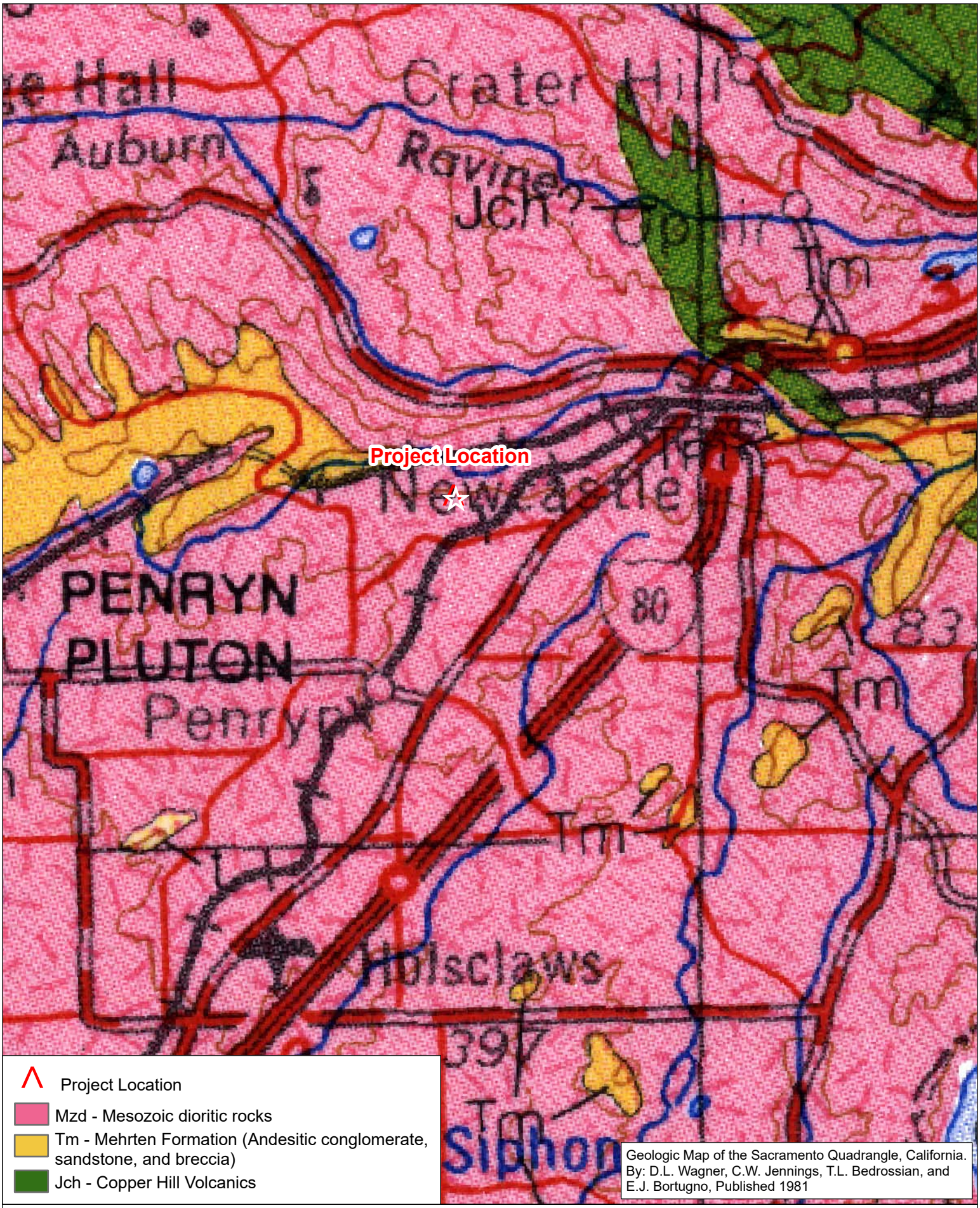
MW-1 (100') — PIEZOMETER (DEPTH IN FEET)

B-2 (46.5') — EXPLORATION BOREHOLE (DEPTH IN FEET)

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PROJECT 8 WINE CAVE 7615 CALLISON ROAD PENRYN, CALIFORNIA	DESIGN ENGINEER: KEG
	DATE: 21 MAR 2022
	JOB NO: 3963
SITE MAP	FIGURE 2

3/22/2022 2:39 PM I:\Practice Groups\Geostructural - Caves Tunnels\Project 8 BEM - 3963 (657)\A\300 CAD\340 Sheet Sets\02_Plans_Maps\GES\2022-0321 Project 8 Site 3963.dwg -Ken McKinley

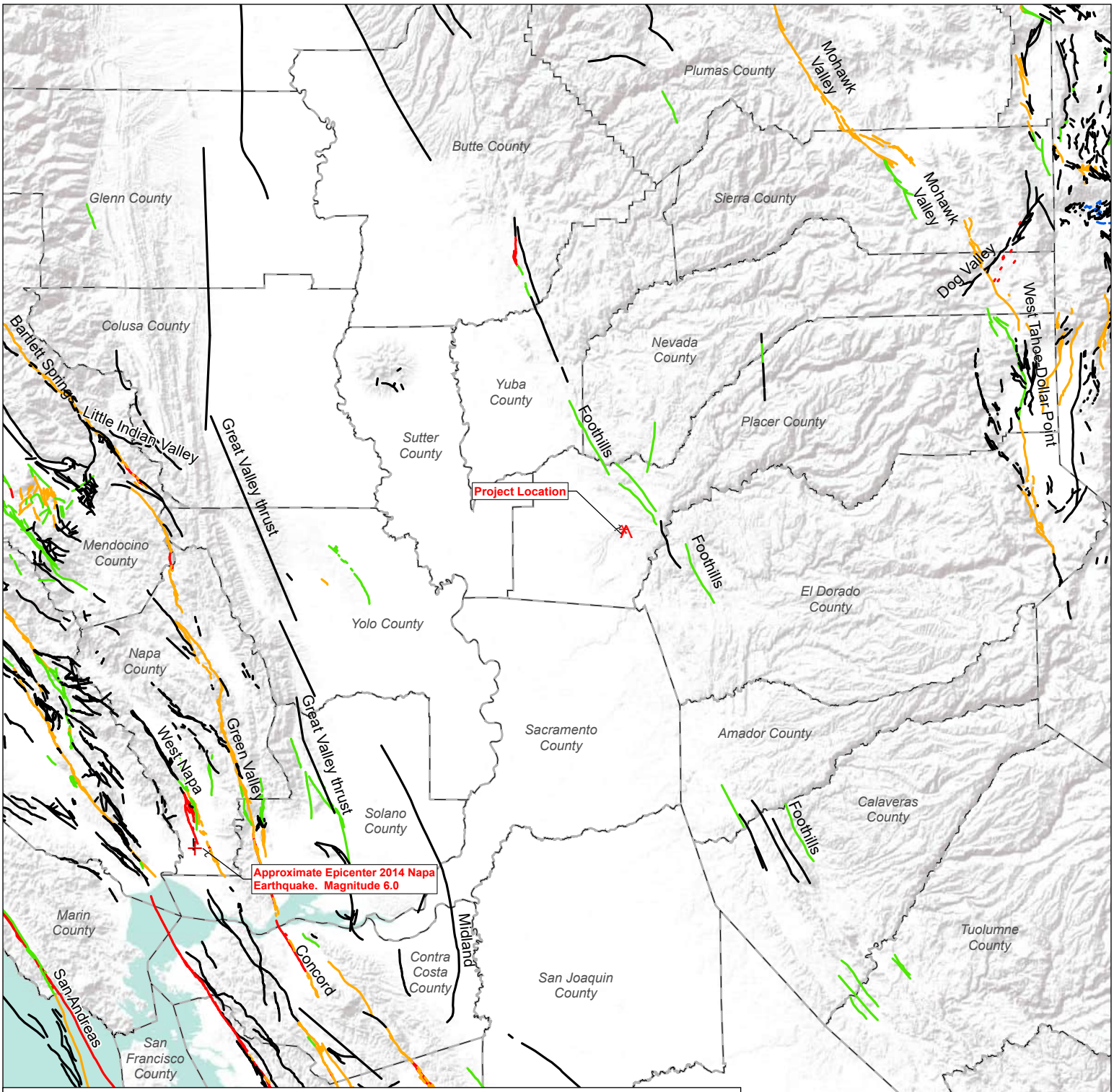


Geologic Map

Project 8 Wine Cave- Placer County, CA

PROVOST& PRITCHARD

FIGURE 3



Project Location

Fault Classification

- "Historical" (evidence of movement over the last 150 years)
- "Latest Quaternary" (evidence of movement over the last 150 to 15,000 years)
- "Late Quaternary" (evidence of movement over the last approximately 15,000 to 130,000 years)
- "Middle and Late Quaternary" (evidence of movement over the last 130,000 to 750,000 years)
- "Undifferentiated Quaternary" (evidence of movement over the last 750,000 to 1.6 million years)
- Unspecified Age
- Class B (various age)

USGS Quaternary Faults and Fold Database of the United States. 2022

Service Layer Credits: Terrain: Sources: Esri, USGS, NOAA

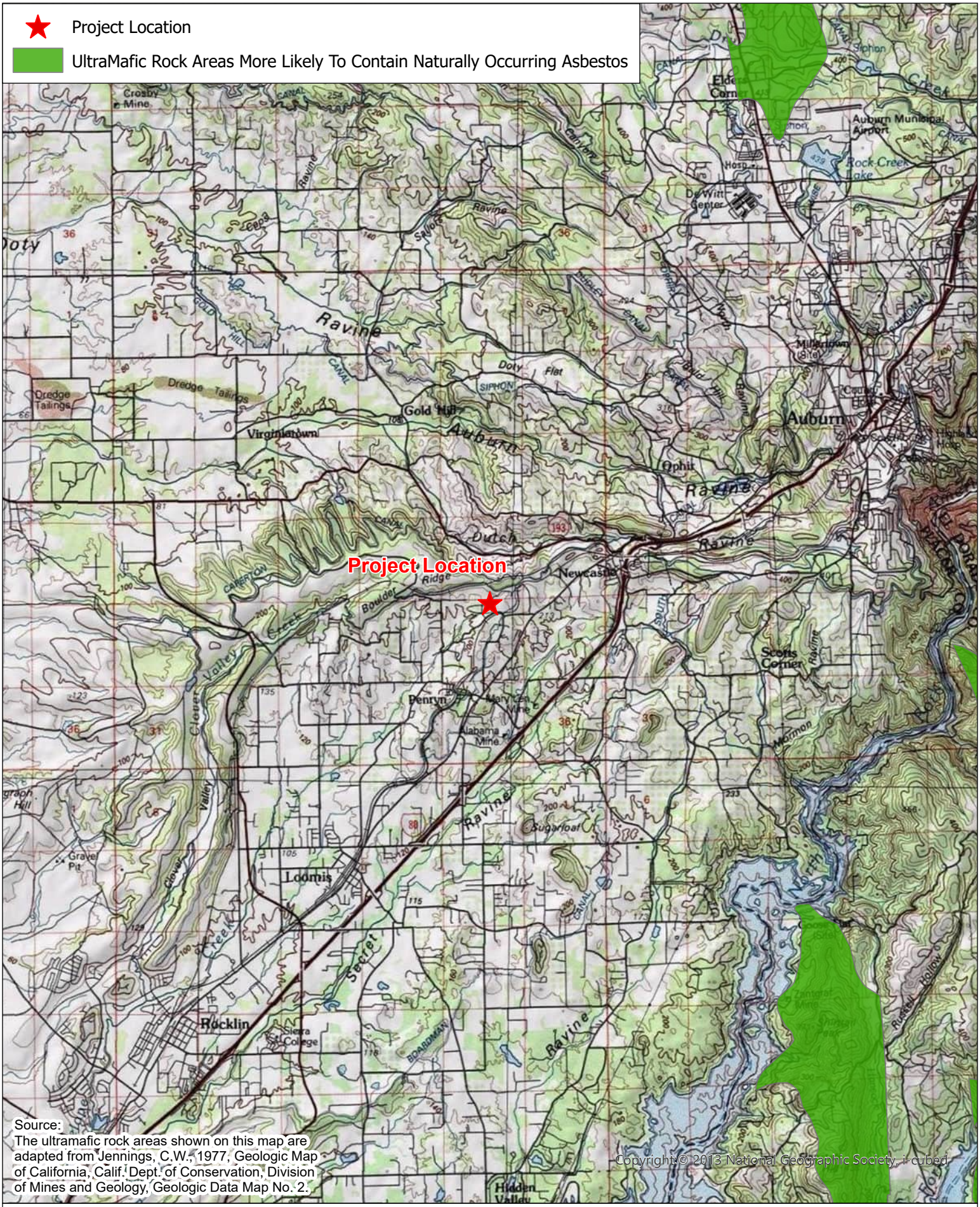
0 10 20
Miles

Earthquake Faults

Project 8 Wine Cave- Placer County, CA

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FIGURE 4

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Ultramafic Rock

Project 8 Wine Cave- Placer County, CA

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FIGURE 5

3/18/2022 G:\Building Engineering and Maintenance Inc-3963\0396322001-Project 8 Wine Cave\400 GIS\Map\Project_8_Wine_Cave.aprx

CALIFORNIA - EPA Map of Radon Zones

http://www.epa.gov/radon/zonemap.html

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.

This map is not intended to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones.

All homes should be tested, regardless of zone designation.

IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of California" (USGS Open-file Report 93-292-I) before using this map. See http://energy.cr.usgs.gov/radon/grpinfo.html This document contains information on radon potential variations within counties. EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.



Zone 1 = Highest Potential (>4 pCi/L)
Zone 2 = Moderate Potential (2-4 pCi/L)
Zone 3 = Low Potential (<2 pCi/L)

pCi/L = Picocuries per Liter

O Not to Scale

Radon Hazard Map

Project 8 Wine Cave- Placer County, CA

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FIGURE 6

Appendix A

Boring Logs and Core Photos

GEOLOGICAL STRENGTH INDEX CHART
HETEROGENEOUS ROCK MASSES

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5/4/2020 11:33 AM Drawing3.dwg -Ken McKinley

RE

SURFACE CONDITIONS OF DISCONTINUITIES (Predominantly bedding planes)	VERY GOOD Very rough, fresh unweathered surfaces	GOOD Rough, slightly weathered surfaces	FAIR Smooth, moderately weathered and altered surfaces	POOR Very Smooth occasionally Slickensided surfaces with compact coatings or fillings or angular fragments	VERY POOR Very Smooth Slickensided or highly weathered surfaces with soft clay coatings or fillings
GSI FOR HETEROGENEOUS ROCK MASSES SUCH AS FLYSCH (Marinos. P and Hoek. E, 2000) From a description of the lithology, structure and surface conditions (particularly of the bedding planes), choose a box in the chart. Locate the position in the box that corresponds to the condition of the discontinuities and estimate the average value of GSI from the contours. Do not try to be too precise. Quoting a range from 33 to 37 is more realistic than giving GSI = 35. Note that the Hoek-Brown criterion does not apply to structurally controlled failures. Where unfavorably oriented continuous weak planar discontinuities are present, these will dominate the behavior of the rock mass. The strength of some rock masses is reduced by the presence of groundwater and this can be allowed for by a slight shift to the right in the columns for fair, poor and very poor conditions. Water pressure does not change the value of GSI and it is dealt with by using effective stress analysis.	70 60	A 50 B 40	C D E 30	F 20	G H 10

COMPOSITION AND STRUCTURE

A
Thick bedded, very blocky sandstone. The effect of pelitic coatings on the bedding planes is minimized by the confinement of the rock mass. In shallow tunnels or slopes these bedding planes may cause structurally controlled instability.

B. Sandstone with thin interlayers of siltstone

C. Sandstone and siltstone in similar amounts

D. Siltstone or silty shale with sandstone layers

E. Weak siltstone or clayey shale with sandstone layers

C, D, E and G: May be more or less folded than illustrated but this does not change the strength. Tectonic deformation, faulting and loss of continuity moves these categories to F and H

F. Tectonically deformed, intensively folded/faulted, sheared clayey shale or siltstone with broken and deformed sandstone layers forming an almost chaotic structure.

G. Undisturbed silty of clayey shale with or without a few very thin sandstone layers

H. Tectonically deformed, silty or clayey shale forming a chaotic structure with pockets of clay. Thin layers of sandstone are transformed into small rock pieces.

MEANS DEFORMATION AFTER TETONIC DISTURBANCE

UNIFIED SOIL CLASSIFICATION SYSTEM

Division		Group Symbol	Group Name
Coarse-Grained Soils (more than 50 percent retained on the No. 200 sieve)	Gravel (% gravel > % sand)	GW	Well-graded Gravel (with Sand)
		GW-GM	Well-graded Gravel with Silt (and Sand)
		GW-GC	Well-graded Gravel with Clay (and Sand)
		GP	Poorly graded Gravel (with Sand)
		GP-GM	Poorly graded Gravel with Silt (and Sand)
		GP-GC	Poorly graded Gravel with Clay (and Sand)
		GM	Silty Gravel (with Sand)
		GC	Clayey Gravel (with Sand)
	Sand (% sand ≥ % gravel)	SW	Well-graded Sand (with Gravel)
		SW-SM	Well-graded Sand with Silt (and Gravel)
		SW-SC	Well-graded Sand with Clay (and Gravel)
		SP	Poorly graded Sand (with Gravel)
		SP-SM	Poorly graded Sand with Silt (and Gravel)
		SP-SC	Poorly graded Sand with Clay (and Gravel)
		SM	Silty Sand (with Gravel)
		SC	Clayey Sand (with Gravel)
Fine-Grained Soils (50 percent or more passing the No. 200 sieve)	Silt or Clay LL < 50	ML	Silt (with Sand or Gravel), Sandy Silt (with Gravel), Gravely Silt (with Sand)
		CL-ML	Silty Clay (with Sand or Gravel), Sandy Silty Clay (with Gravel), Gravelly Silty Clay (with Sand)
		CL	Lean Clay (with Sand or Gravel), Sandy Lean Clay (with Gravel), Gravelly Lean Clay (with Sand)
		OL	Organic Clay (with Sand or Gravel), Sandy Organic Clay (with Gravel), Gravelly Organic Clay (with Sand), Organic Silt (with sand or gravel), Sandy Organic Silt (with Gravel), Gravelly Organic Silt (with Sand)
	Silt or Clay LL ≥ 50	MH	Elastic Silt (with Sand or Gravel), Sandy Elastic Clay (with Gravel), Gravely Fat Clay (with Sand)
		CH	Fat Clay (with Sand or Gravel), Sandy Fat Clay (with Gravel), Gravely Fat Clay (with Sand)
		OH	Organic Clay (with Sand or Gravel), Sandy Organic Clay (with Gravel), Gravely Organic Clay (with Sand), Organic Silt (with Sand or Gravel), Sandy Organic Silt (with Gravel), Gravelly Organic Silt (with Sand)
Highly Organic Soils		PT	Peat and other highly organic soils

NOTE: Percentages are by dry weight. Soil classifications based on some criteria that are not shown. Group Name items in parentheses may or may not apply, depending on percent of sand or gravel.

Coarse Grained Soil Definitions	
Fraction	Particle Dimensions or U.S. Standard Sieve Size/No.
Boulders	Above 12"
Cobbles	12" to 3"
Gravel	
-coarse	3" to 3/4"
-fine	3/4" to No. 4
Sand	
-coarse	No. 4 to No. 10
-medium	No. 10 to No. 40
-fine	No. 40 to No. 200


Split-barrel. 3-inch O.D., 2.43-inch I.D.


Split-barrel, 2.5-inch O.D., 1.93-inch I.D.


Standard Penetration Test (SPT), 2.0-inch O.D., 1.375-inch I.D.


Shelby Tube


Disturbed Sample


No Recovery


Groundwater level during drilling


Subsequent groundwater level

NOTE:
O.D. = outside diameter I.D. = inside diameter

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LOG LEGEND AND SOIL CLASSIFICATION

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WEATHERING

SEVERELY WEATHERED: Minerals decomposed to soil, but rock fabric and structure are preserved.
HIGHLY WEATHERED: Abundant fractures coated with oxides, carbonates, sulphates, mud, etc. thorough discoloration, rock disintegration, mineral decomposition.
MODERATELY WEATHERED: Some fracture coating, moderate or localized discoloration, little to no effect on cementation, slight mineral decomposition.
SLIGHTLY WEATHERED: A few stained fractures, slight discoloration, little or no effect on cementation, no mineral decomposition.
FRESH: unaffected by weathering agents: no appreciable change with depth.

FRACTURE, JOINT, OR SHEAR SPACING

(Spacing in Inches)	
CRUSHED	Less than 0.5
INTENSELY FRACTURED	0.5 to 1.25
CLOSELY FRACTURED	1.25 to 6
MODERATELY FRACTURED	6 to 12
OCCASIONALLY FRACTURED	12 to 48
VERY LITTLE FRACTURED	Greater than 48

THICKNESS OF SEDIMENTARY ROCK BEDS

(Thickness in Inches)	
THINLY LAMINATED	Less than 0.25
LAMINATED	0.25 to 0.75
VERY THINLY BEDDED	0.75 to 2.5
THINLY BEDDED	2.5 to 8
MEDIUM BEDDED	8 to 24
THICKLY BEDDED	24 to 72
VERY THICKLY BEDDED	Greater than 72

FRACTURE OR LAYER SEPARATION

(Thickness of Separations in Millimeters)	
VERY WIDE	> 10
OPEN	2.5 to 10
MODERATELY OPEN	0.5 to 2.5
TIGHT	0.1 to 0.5
VERY TIGHT	<0.1

FRACTURE OR LAYER ROUGHNESS

SOFT GOUGE: Open and continuous with soft gouge
SLICKENSIDED: Open and continuous with gouge
SLIGHTLY ROUGH AND SOFT: Soft joint rock wall
SLIGHTLY ROUGH: Hard joint rock wall
VERY ROUGH: Non-continuous, Hard joint rock wall

STRUCTURE

LAMINATED/SHEARED: Lack of blockiness due to close spacing of shear planes.
DISINTEGRATED: poorly interlocked, heavily broken, mix of angular and rounded rock pieces.
DISTURBED/SEAMY: Folded with angular blocks, formed by many intersecting joint sets, persistence of bedding planes or schistosity.
VERY BLOCKY: Interlocked, partially disturbed, with multi-faceted angular blocks formed by 4 or more joint sets.
BLOCKY: Well interlocked, undisturbed rock mass, consisting of cubical blocks formed by three intersecting joint sets.
INTACT/MASSIVE: Intact rock specimens with few widely spaced discontinuities.

HARDNESS

SOFT: Can be readily indented, grooved or gouged with fingernail.
LOW HARDNESS: Can be gouged deeply or carved easily with a knife blade
MODERATELY HARD: Can be readily scratched by a knife blade; scratch leaves a heavy trace of dust and is readily visible after the powder has been blown away.
HARD: Can be scratched with difficulty; scratch produced a little powder and is often faintly visible.
VERY HARD: Cannot be scratched with a knife blade; leaves a metallic streak.

STRENGTH (ISRM STANDARDS)*

GRADE	FIELD IDENTIFICATION	APPROXIMATE RANGE ON UNIAXIAL COMPRESSIVE STRENGTH (psi)
R0	EXTREMELY WEAK: Indented by thumbnail	40-150
R1	VERY WEAK: Crumbles under firm blows with point of geological hammer	150-730
R2	WEAK: Shallow indentations can be made by firm blow with point of geological hammer	730-3,600
R3	MEDIUM STRONG: Can be fractured with single firm blow of geological hammer	3,600-7,300
R4	STRONG: Requires more than one blow of geological hammer to fracture it	7,300-14,500
R5	VERY STRONG: Requires many blows of geological hammer to fracture it	14,500-36,300
R6	EXTREMELY STRONG: Can be chipped by geological hammer	+36,300

GROUND WATER

FLOWING
DRIPPING
WET
DAMP
DRY

NOTE

* STRENGTH GRADE, FIELD IDENTIFICATION, AND RANGE OF UNIAXIAL COMPRESSIVE STRENGTHS FROM INTERNATIONAL SOCIETY FOR ROCK MECHANICS COMMISSION ON STANDARDIZATION OF LABORATORY AND FIELD TESTS, 1978. UNIAXIAL COMPRESSIVE STRENGTH VALUES ARE CONVERTED FROM METRIC UNITS AND ROUNDED.

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ROCK PROPERTY DEFINITIONS

5/4/2020 11:33 AM Drawing3.dwg -Ken McKinley

GEOLOGICAL STRENGTH INDEX FOR JOINTED ROCKS (Hoek and Marinos, 2000)

From the lithology, structure and surface conditions of the discontinuities, estimate the average value of GSI. Do not try to be too precise. Quoting a range from 33 to 37 is more realistic than stating that GSI = 35. Note that the table does not apply to structurally controlled failures. Where weak planar structural planes are present in a unfavorable orientation with respect to the excavation face, these will dominate the rock mass behavior. The shear strength of surfaces in rocks that are prone to deterioration as a result of changes in moisture content will be reduced is water if present. when working with rocks in the fair to very poor categories, a shift to the right may be made for wet conditions. water pressure is dealt with by effective stress analysis.

STRUCTURE

SURFACE CONDITIONS

DECREASING SURFACE QUALITY →

	VERY GOOD Very rough, fresh unweathered surfaces	GOOD Rough, slightly weathered, iron stained surfaces	FAIR Smooth, moderately weathered and altered surfaces	POOR Slickensided, highly weathered surfaces with compact coatings or fillings or angular fragments	VERY POOR Slickensided, highly weathered surfaces with soft clay coatings or fillings
INTACT OR MASSIVE Intact rock specimens or massive in situ rock with few widely space discontinuities	90 80			N/A	N/A
BLOCKY Well interlocked undisturbed rock mass consisting of cubical blocks formed by three intersecting discontinuity sets		70 60			
VERY BLOCKY Interlocked, partially disturbed mass with multi-faceted angular blocks formed by 4 or more joint sets			50 40		
BLOCKY/DISTURBED/SEAMY Folded with angular blocks formed by many intersecting discontinuity sets. Persistence of bedding planes or schistosity				30	
DISINTEGRATED Poorly interlocked, heavily broken rock mass with mixture of angular and rounded rock pieces				20	
LAMINATED/SHEARED Lack of blockiness due to close spacing of weak schistosity or shear planes	N/A	N/A			10

DECREASING INTERLOCKING OF ROCK PIECES ↓

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GEOLOGICAL STRENGTH INDEX CHART - JOINTED ROCK

5/4/2020 11:33 AM Drawing3.dwg -Ken McKinley

LOG OF BOREHOLE NO. MW-1

PAGE 1 of 2

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7516 Callisen Road, Penryn, CA

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EST. 1968
An Employee Owned Company

19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

www.provostandpritchard.com

COORDINATES: 38.870710, -121.160275

REFERENCE POINT FOR DEPTH MEASUREMENT:

SURFACE CONDITION: Dry Soil — ELEVATION OF PIEZOMETER COLLAR: 910'

DIRECTION OF BOREHOLE: Vertical — INCLINATION FROM HORIZONTAL: 90°

TOTAL DEPTH: 100' — DATE STARTED: 1/10/2022 — DATE COMPLETED: 1/11/2022

CONTRACTOR: TABER

DRILL RIG: CME-55 Track Rig — DRILLER: TABER

LOGGED BY: R. Padgett (1/10/2022), N. Mocha (1/11/2022) — DRAWN: N. Mocha — APPROVED:

NUMBER OF CORE BOXES: 8 — STORED:

REMARKS: Boring Completed as Piezometer: 1.5" casing, Solid 0'-60' bgs, slotted 60'-100' bgs.
Annular material: Portland Cement Seal 0'-20' bgs, Bentonite 20'-25' bgs, #3 monterey Sand 25'-100' bgs

DEPTH	ELEVATION	DATE / Box #	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
0	910	1/10/2022	7, 11, 2, 11, 26, 40, 21, 38/4", 20, 39, 45, 50/4", 25, 49, 50/6", 19, 32, 40, 50/5", 26, 50/5"			RED BROWN, YELLOWISH BROWN AND DARK GRAY QUARTZ DIORITE, severely weathered, low hardness, very weak, highly weathered at 4', damp						Drilling with 4" @ SSA
5	905											
10	900			Full Circulation		OLIVE DIORITE, fine grained, moderately weathered, closely fractured, soft, extremely weak, damp, MnO staining on joint surfaces and FeO stained sheets locally						Casing set at 10½', begin HQ with Rock discharge, emerg.
15	895	Box 1				LIGHT GRAY, DARK GRAY AND RED BROWN QUARTZ DIORITE, moderately weathered, low hardness, very weak, no apparent fractures (Run 1)		0 ↓		11½'	66	Run 1 - 12:26 - 10 min
20	890					Run 2 - Same as Run 1 - breaks at 20° to 10° d.p, tight, very rough (mechanical breaks at 17', 18½', and 19½')		20° 20° 10°		16½'	80	Run 2 - 12:37 - 8 min
25	885	Box 2				Run 3 - Same as Run 2 - Breaks at 22' and 22½' with 10° dip, rough, undulating - Pegmatite dikes at 22½' N-W 30° and 70° d.p.		10° 10°		21½'	30	Run 3 - 12:56 - 6 min
30	880					Run 4 - No recovery, possible clast from Pegmatite dike at 22½' blocked off drill bit				26½'	0	Run 4 - 13:15 - 5 min
35	875					Run 5 - Same as Run 3 - (mechanical breaks at 32', 32½', 33½', 34', 35', and 36' with 10° to 20° dips, rough)				31½'	80	Run 5 - 13:30 - 5 min
40	870	Box 3				Run 6 - Same as Run 5 - Parallel joints at 40° with 80° dips, rough, undulating, JRC 12-14, FeO staining on joint surface, open, no infill		50°		36½'	100	Run 6 - 13:37 - 7 min
45	865					Run 7 - Same as Run 6 - Parallel joints at 44½' and 45' with 30° d.p, rough, undulating, JRC 14-16, tight, no infill - Joint at 45½' with 30° d.p, slightly rough, open, no infill - Joint at 46½' with 40° d.p, slightly rough and soft, undulating, JRC 6-10, FeO staining (mechanical breaks at 42' with 10° d.p, 43' with 10° d.p)		30° 40°		41½'	100	Run 7 - 13:49 - 4 min
50	860					Run 8 - Same as Run 7 (mechanical breaks at 47½', 48', 48½', 49½' with 10° to 20° d.ps)				46½'	60	Run 8 - 14:03 - 7 min

LOG OF BOREHOLE NO. MW-1

PAGE 2 of 2

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7516 Callison Road, Penryn, CA

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DEPTH	ELEVATION	DATE	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
50	860											
		Box 4		Full Circulation		RUN 9 - Same as RUN 8 but Massive					60	RUN 8
55	855										51½'	RUN 9 - 14:28
											95	- 8 min
						RUN 10 - Same as RUN 9 - Joint at 57' with 45° d.p, slightly rough, undulating, JRC 12-14, FeO staining - Contact at 60½' with 35° d.p, tight, no infill						
60	850							45°			56½'	RUN 10-14:42
											100	- 8 min
						OLIVE DIORITE, fine grained, closely fractured, soft, very weak		40°			61½'	RUN 11-14:56
65	845					RUN 11 - Olive Diorite becomes coarse grained - Joint at 61½' with 40° d.p, rough, JRC 14-16 - Joint at 63½' with 30° d.p, slightly rough, FeO staining - Joint at 64½' with 30° d.p, slightly rough, FeO staining - Joint at 65½' with 40° d.p, slightly rough, FeO staining		30°			100	
								40°				
						RUN 12 - Same as RUN 11 - multiple joints with 10-30° d.ps, rough, undulating, JRC 14-16, No infill					66½'	RUN 12-
70	840	Box 6									100	
						RUN 13 - Same as RUN 12 - mechanical fractures up to 74½', then very closely spaced joints predominantly at 30 to 40° d.p with 80 to 90° fractures between. Becomes moderately weathered, moderately hard and very weak.					71½'	RUN 13-15:17
75	835										90	- 10 min
						RUN 14 - Same as RUN 13 but highly weathered.					76½'	RUN 14-15:43
80	830	Box 7									90	- 8 min
						RUN 15 - Same as RUN 14 - (mechanical breaks at 82', 83', 83½', 83¾', 84', 84½', and 86')					81½'	RUN 15-16:16
85	825										95	- 10 min
												16:26
						RUN 16 - Same as RUN 15 - NO recovery for bottom 2½' - Joint at 87' with 20° d.p, slightly rough, no infill, JRC 8-10 - (mechanical breaks at 87½' and 87¾')		20°			86½'	RUN 16 - 08:30 (1/11/2022)
90	820										50	- 10 min
		Box 8				RUN 17 - Same as RUN 16 - Joint at 93½' with 60° d.p, rough, no infill, JRC 14-16 - Joint at 95½' with 50° d.p, open, thin soft clay infill, slightly rough, JRC 8-10 (mechanical breaks at 91½', 95', 96')		60°			91½'	RUN 17-08:50
								50°			90	- 10 min
						RUN 18 - Same as RUN 17 - Joint at 97½' and 98' with 30° d.p, slightly open, very thin FeO infill, moderately rough, JRC 8-10 - Joint at 99' with 15° d.p, open, very thin soft clay infill, rough, JRC 14-16 (mechanical breaks at 97' and 93½')		30°			96½'	RUN 18-09:15
100	810							30°			90	- 15 min
								15°			100'	09:30
						Boring terminated at 100'						
						NO Free Groundwater Encountered						

LOG OF BOREHOLE NO. B-2

PAGE 1 of 1

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7615 Callison Road, Penryn, CA

EST. 1968 PROVOST& PRITCHARD CONSULTING GROUP
An Employee Owned Company

19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

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COORDINATES: 38.8702, -122.1606

REFERENCE POINT FOR DEPTH MEASUREMENT:

SURFACE CONDITION: Dry Soil, ~2' OG — ELEVATION OF PIEZOMETER COLLAR: No Piezometer

DIRECTION OF BOREHOLE: Vertical — INCLINATION FROM HORIZONTAL: 90°

TOTAL DEPTH: 46 1/2' — DATE STARTED: 1/12/2022 — DATE COMPLETED: 1/13/2022

CONTRACTOR: TABER

DRILL RIG: CME-55 Tracic Rig — DRILLER: TABER

LOGGED BY: N. MOCHA — DRAWN: — APPROVED:

NUMBER OF CORE BOXES: 4 — STORED:

REMARKS

DEPTH	ELEVATION	DATE / Box #	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
0	860'	1/12/22	2 8 9			RED-BROWN CLAYEY SAND (SC), medium to coarse grained sand's, damp, completely weathered bedrock						14:30/1/12/22 Drilling with 4" ø SSA
			4 5 7			RED-BROWN QUARTZ DIORITE, severely weathered, soft, extremely weak, damp. Predominantly fine grained clayey matrix with plagioclase sand-sized particles.						
5	855'		6 8 14			— At 6', rock becomes highly weathered, low hardness, and is very weak						
			10 17 22 24									HQ coring started at 10'
10	850'		24 46 50/3" 38 50/4"	Full Circulation		Run 1 - Same as 2-10'; mechanical breaks at 10½', 10¾'					10'	16:10
		Box 1									-75	Run 1 - 5 min
						Run 2 - Becomes moderately weathered, occasionally fractured, massive, very weak to weak - Joint at 11¾', 20° d.p, very tight, slightly rough, very thin FeO and MnO in fill, JRC 8-10 (mechanical breaks at 12', 13', 13½', 14¾', 15½', 16')		20°	0		11½'	Run 2 - 16:15
15	845'										-100	-8 min
												16:23
						Run 3 - Same as Run 2, very little fracturing (mechanical breaks at 16¾', 17', 17¼', 19½', 20¼', 20½')					16½'	Run 3 - 16:35
20	840'	1/13/22 Box 2									-90	-10 min
												16:45
						Run 4 - Same as Run 3 but occasionally fractured, weak to medium strong - Joints at 24' and 24½', 60° d.p, very tight, slightly rough and soft, JRC 6-8, thin FeO clay infill (mechanical breaks at 22½', 23', 23¼')		60° 60°			21½'	Run 4 - 09:00 1/13/22
25	835'										-100	- 9 min
												09:09
						Run 5 - Same as Run 4 but very little fracturing, no visible fractures or joints (mechanical breaks at 27', 27¾', 29½', 29¾')					26½'	Run 5 - 09:16
30	830'	Box 3									-100	-7 min
												09:17
						Run 6 - Same as Run 5, occasionally fractured - Joints at 33½', 35', and 36½', 30-40° d.p, very tight to tight, slightly rough, JRC 8-12 - Joint at 36½', 60° d.p, moderately open, slightly rough and soft, thin FeO infill, JRC 10-12. (mechanical breaks at 32½', 33', 34', 34½')		40° 40°			31½'	Run 6 - 09:20
35	825'										-100	- 7 min
												09:27
						Run 7 - Same as Run 6 but closely fractured - Joints at 36½'-38', 25°, 55°, 70° d.p, tight to moderately open, slightly rough to very rough, JRC 12-16, thin MnO infill - Joint at 39', 60° d.p, moderately open, very rough, JRC 16-18, thin Quartz infill with FeO staining. (mechanical breaks at 37¾', 38', 40')		30°, 60° 25°, 70° 55° 60°			36½'	Run 7 - 09:35
40	820'	Box 4									-80	- 7 min
												09:42
						Run 8 - Same as Run 7 but moderately fractured - Joints at 43½', 43¾', 44½', 45', 46', 30 to 45° d.p, tight, slightly rough to rough, JRC 10-12, thin FeO infill. (mechanical breaks at 42½', 44¾')		40° 40° 30° 30° 45°			41½'	Run 8 - 09:50
45	815'										-100	- 8 min
											46½'	10:00
						Boring terminated at 46½' No Free Groundwater Encountered						
50	810'											

LOG OF BOREHOLE NO. B-3

PAGE 1 of 1

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7516 Callisom Road, Penryn, CA

EST. 1968 PROVOST& PRITCHARD CONSULTING GROUP
An Employee Owned Company

19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

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COORDINATES: 38.8701, -122.1603

REFERENCE POINT FOR DEPTH MEASUREMENT:

SURFACE CONDITION: Dry soil, ~2' OB — ELEVATION OF PIEZOMETER COLLAR: No Piezometer

DIRECTION OF BOREHOLE: Vertical — INCLINATION FROM HORIZONTAL: 90°

TOTAL DEPTH: 40' — DATE STARTED: 1/13/2022 — DATE COMPLETED: 1/13/2022

CONTRACTOR: TABER

DRILL RIG: CME-55, Track Rig — DRILLER: TABER

LOGGED BY: N. MOCHA — DRAWN: N. MOCHA — APPROVED:

NUMBER OF CORE BOXES: 4 — STORED:

REMARKS

DEPTH	ELEVATION	DATE / Box #	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
0		1/13/22	3 2 4 5	Full Circulation		RED-BROWN, LIGHT/DARK GRAY QUARTZ DIORITE, severely weathered, soft, extremely weak, damp, roots and rootlets present in top 1'	HW		0	100		1/13/2022 Drilling with 4" ø SSA
			4 5 7 10			— At 3', rock becomes highly weathered and low hardness						
5			22 28 50/6"			— At 5½', rock becomes soft and extremely weak						
			15 22 28 32									Switch to HQ coring at 9½'
10		Box 1	19 40 50/3" 50/4½"			RUN 1 - Similar composition as above, but moderately weathered, occasionally fractured, low hardness, and very weak - Joint at 11', 75° dip, tight, slightly rough, JRC 4-6 (mechanical break at 10')		0 75°			9½'	RUN 1 12:30
											100	-5 min 12:35
						RUN 2 - Same as RUN 1 but very little fracturing and moderately hard (mechanical breaks at 12½', 13½', 14½', 15½')					11½'	RUN 2 12:35
15											100	-4 min 12:42
						RUN 3 - Same as RUN 2 but occasionally fractured - Joint at 17¾', 30° dip, moderately open, slightly rough and soft, JRC 10-12, thin FeO in fill, 4" wide zone at the joint with predominantly more plagioclase. (mechanical breaks at 17½', 18', 18¾')		30°			16½'	RUN 3 12:45
20		Box 2									100	-8 min 12:53
						RUN 4 - Same as RUN 3 but very little fracturing. (mechanical breaks at 22½', 23½', 24½', 25')					21½'	RUN 4 12:55
25											100	-13 min 13:07
						RUN 5 - Same as RUN 4. (mechanical breaks at 27', 28½', 29', 30½')					26½'	RUN 5 13:13
30		Box 3									100	-7 min 13:20
						RUN 6 - Same as RUN 5. (mechanical breaks at 32', 32½', 34½', 34¾')					31½'	RUN 6 13:46
35											100	-9 min 13:55
						RUN 7 - Same as RUN 6 but occasionally fractured. Joint at 38½', 50° dip, moderately open, slightly rough, JRC 8-10, moderately thick hard Quartz infill with FeO staining. (mechanical breaks at 37', 38', 39½')		50°			36½'	RUN 7 14:05
40		Box 4									100 40'	-5 min 14:10
						Boring terminated at 40' NO Free Groundwater Encountered						
45												

LOG OF BOREHOLE NO. B-4

PAGE 1 of 2

PROJECT NUMBER:

PROJECT NAME: Project 8

LOCATION: 7516 Callison Road, Penryn, CA

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19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

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COORDINATES: 38.8704, -121.1608

REFERENCE POINT FOR DEPTH MEASUREMENT:

SURFACE CONDITION: Dry Soil, EG | ELEVATION OF PIEZOMETER COLLAR: No Piezometer

DIRECTION OF BOREHOLE: Vertical | INCLINATION FROM HORIZONTAL: 90°

TOTAL DEPTH: 60' | DATE STARTED: 1/11/2022 | DATE COMPLETED: 1/12/2022

CONTRACTOR: TABER

DRILL RIG: CME-55 Track Rig | DRILLER: TABER

LOGGED BY: N. MOCHA | DRAWN: | APPROVED:

NUMBER OF CORE BOXES: 5 | STORED:

REMARKS

DEPTH	ELEVATION	DATE / Box #	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
0	870'											Drilling with 4" ϕ SSA
5	865	1/11/2022	4 5 6 7 9 11 11 15 16 26 24 25 14 18 27 33 19 50/5½" 23 50	Full Circulation		RED BROWN QUARTZ DIORITE, severely weathered, soft, extremely weak, damp Exhibits low hardness at 2' Becomes highly weathered at 4'						
10	860	Box 1				RUN 1 - Same as 4' to 10' RUN 2 - Same as Run 1, Coarse grained - (mechanical breaks at 11½', 12', 12½', and 14')		0		75	10'	Switch to HQ coring at 7' RUN 1 - 09:30
15	855									80	11'	RUN 2 - 09:35 - 8 min
						RUN 3 - Same as Run 2 - (mechanical breaks at 16½', 17', 17¼', 18', 19', 19½')				80	16'	RUN 3 - 09:45 - 8 min
20	850	Box 2				RUN 4 - Same as Run 3 - (mechanical breaks at 21½', 22', 23', 23½', 23¾')				80	21'	RUN 4 - 09:55 - 7 min
25	845					RUN 5 - LIGHT BROWN DIORITE, moderately weathered, massive, low hardness, very weak, fine grained FeO mottles. - Joint at 26½' and 27' with 10° dip, tight, slightly rough, thin FeO and MnO infill, JRC 8-10		10° 10°		50	26'	RUN 5 - 10:05 - 10 min
30	840					GRAY, RED-BROWN QUARTZ DIORITE, highly weathered, occasionally fractured, low to moderately hard, weak, damp, coarse grained						
		Box 3				RUN 6 - Same QUARTZ DIORITE as 27½ - 31' - Joint at 32' with 70° dip, tight, slightly rough and soft, JRC 2-4, Soft clay infill - (mechanical breaks at 31½', 34', 34¼', 34½', and 34¾')		70°		90	31'	RUN 6 - 10:25 - 7 min
35	835					RUN 7 - Same as Run 6 - (mechanical breaks at 36½', 37', 38', 38½', and 40')				90	36'	RUN 7 - 10:35 - 9 min
40	830					RUN 8 - Same as Run 7 - Joint at 44' with 30° dip, tight, slightly rough and soft, JRC 8-10 - (mechanical breaks at 41½', 42', 42½', 44', and 45')		30°		90	41'	RUN 8 - 10:50 - 8 min
45	825	Box 4				RUN 9 - Same as Run 8 - Joint at 47½' with 60° dip, tight, slightly rough + soft, JRC 4-6 - Joint at 49' with 45° dip, tight, slightly rough, FeO mottles, JRC 14-16 - (mechanical breaks at 46½', 48', 48¼', 50', and 50¼')		60° 45°		100	46'	RUN 9 - 11:07
50	820											

LOG OF BOREHOLE NO. B-4

PAGE 2 of 2

PROJECT NUMBER:

PROJECT NAME: Project 8

LOCATION: 7516 Callison Road, Penryn, CA

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19969 Greenley Road, Suite J
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DEPTH	ELEVATION	DATE	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
50	820			Full circulation			HW MW SW FR		0 25 50 75 100	0 25 50 75 100	--100	
						RUN 10 - Same as Run 9 - Joint at 52' with 50° d.p, moderately open, very rough, JRC 14-16 -		50'			51'	RUN 10 - 10:20
55	815	Box 5									--60	- 9 min
						RUN 11 - Same as Run 10 - (mechanical breaks at 56½, 56¾', 57', and 58')					56'	RUN 11 - 11:35
											--80	- 5 min
60	810										60'	
						Boring terminated at 60'						
						No Free Groundwater Encountered						

LOG OF BOREHOLE NO. B-5

PAGE 1 of 2

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7516 Callison Road, Penryn, CA

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An Employee Owned Company

19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

www.provostandpritchard.com

COORDINATES: 38.8704, -121.1660

REFERENCE POINT FOR DEPTH MEASUREMENT:

SURFACE CONDITION: Dry Soil, ~2½' OG | ELEVATION OF PIEZOMETER COLLAR: No Piezometer

DIRECTION OF BOREHOLE: Vertical | INCLINATION FROM HORIZONTAL: 90°

TOTAL DEPTH: 56½' | DATE STARTED: 1/14/2022 | DATE COMPLETED: 1/14/2022

CONTRACTOR: TABER

DRILL RIG: CME-55 Track Rig | DRILLER: TABER

LOGGED BY: N. MOCHA | DRAWN: | APPROVED:

NUMBER OF CORE BOXES: 4 | STORED:

REMARKS

DEPTH	ELEVATION	DATE/Box #	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
0	880	1/14/2022	2 3 4 6 3 6 11 11 15 25 27 40 14 15 22 28 29 50/6" 20 26 44 50/3"	Full Circulation		RED-BROWN QUARTZ DIORITE, severely weathered, soft, extremely weak, damp, roots/rootlets present to 2'	HW MW SW F	0	0 25 50 75 100	100		Drilling with 4" Ø SSA
5	875					RED-BROWN, DARK/LIGHT GRAY QUARTZ DIORITE, highly weathered, low hardness, very weak, coarse grained						
10	870	Box 1				RUN 1 - Same as above RUN 2 - Same as Run 1					11' - 75 11½' - 20	HQ coring at 11' RUN 1 RUN 2-10:00 5 min
15	865					Run 3 - Same as Run 2 but moderately weathered - (mechanical breaks at 18', 18½', 19½', 20', 21½')					16½' - 100	RUN 3-10:07 7 min
20	860					Run 4 - Same as Run 3 - (mechanical breaks at 22', 23¼', 23½', 24½', and 26')					21½' - 100	RUN 4-10:15 7 min
25	855	Box 2				RUN 5 - Same as Run 4 -					26½' - 6	RUN 5-10:25 6 min
30	850					RUN 6 - Same as Run 5 but occasionally fractured - Joint at 32' with 60° dip, very wide, rough, JRC 14-16, soft clay and FeO infill with 9" wide zone of hard, sheared Quartz infill		60°			31½' - 80	RUN 6-10:34 8 min
35	845					RUN 7 - Same as RUN 6 but very little fracturing - Joints at 40½' with 45° and 55° dips, tight, slightly rough, very thin FeO coating, JRC 10-12 (mechanical breaks at 37½', 38', 39½', 39¾')		45° 55°			36½' - 100	RUN 7-10:47 6 min
40	840	Box 3				RUN 8 - Same as Run 6 - Joints at 45½' to 46½' with 70° dips, tight, slightly rough, thin FeO infill - Joint at 46' with 70° dip, open, very rough, thick and hard Quartz infill, JRC 14-16		70° 70° 70°			41½' - 90	RUN 8-11:00 6 min
45	835					RUN 9 - Same as Run 8 - Joint at 45' with 50° dip, tight slightly rough, thin FeO infill, JRC 14-16 - Joint at 51' with 70° dip, tight, slightly rough and soft, JRC 8-10 -		50°			46½' - 100	RUN 9-11:07
50	830											

LOG OF BOREHOLE NO. B-5

PAGE 2 of 2

PROJECT NUMBER: Project 8

PROJECT NAME:

LOCATION: 7516 Callisch Road, Penryn, CA

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

19969 Greenley Road, Suite J
Sonora, CA 95370
Tel: (866) 776-6200

www.provostandpritchard.com

DEPTH	ELEVATION	DATE	TECHNICAL LOG/NOTES	NOTE ON GROUNDWATER AND CIRCULATION	GRAPHIC LOG	DESCRIPTION	WEATHERING	FRACTURE LOG	R. Q. D. %	CORE RECOVERY	END OF RUN	REMARKS/TIME
50	830	1/14/2022 Bed 4		Full Circulation		(mechanical breaks at 47½', 48½' and 49')		70°			-100	RUN 9
						RUN 10 - Same as Run 8 - Joint at 56' with 50° dip, tight, slightly rough and 50ft, JRC 4-6 - (mechanical breaks at 51¾', 53', 54', and 55')					51½'	RUN 10 - 11:20
55	825							50°			-80	8 min
						Boring Terminated at 56½'					56½'	11:32
						No Free Groundwater Encountered						

Core Box Photos 03963 KEG



MW-1 1 of 8 JPEG image 30.jpg



MW-1 2 of 8 JPEG image 29.jpg

Core Box Photos 03963 KEG



MW-1 3 of 8 JPEG image 28.jpg



MW-1 4 of 8 JPEG image 27.jpg

Core Box Photos 03963 KEG



MW-1 5 of 8 JPEG image 26.jpg



MW-1 6 of 8 JPEG image 25.jpg

Core Box Photos 03963 KEG



MW-1 7 of 8 JPEG image 24.jpg



MW-1 8 of 8 JPEG image 22.jpg

Core Box Photos 03963 KEG



B-2 1 of 4 JPEG image 15.jpg



B-2 2 of 4 JPEG image 14.jpg

Core Box Photos 03963 KEG



B-2 3 of 4 JPEG image 13.jpg



B-2 4 of 4 JPEG image 12.jpg

Core Box Photos 03963 KEG



B-3 1 of 4 JPEG image 11.jpg



B-3 2 of 4 JPEG image 10.jpg

Core Box Photos 03963 KEG



B-3 3 of 4 JPEG image 9.jpg



B-3 4 of 4 JPEG image 8.jpg

Core Box Photos 03963 KEG



B-4 1 of 4 JPEG image 21.jpg



B-4 2 of 4 JPEG image 20.jpg

Core Box Photos 03963 KEG



B-4 3 of 5 JPEG image 18.jpg



B-4 4 of 5 JPEG image 17.jpg

Core Box Photos 03963 KEG



B-4 5 of 5 JPEG image 16.jpg



B-5 1 of 4 JPEG image 2.jpg

Core Box Photos 03963 KEG



B-5 2 of 4 JPEG image 7.jpg



B-5 3 of 4 JPEG image 3.jpg

Core Box Photos 03963 KEG



B-5 4 of 4 JPEG image 6.jpg

Appendix B

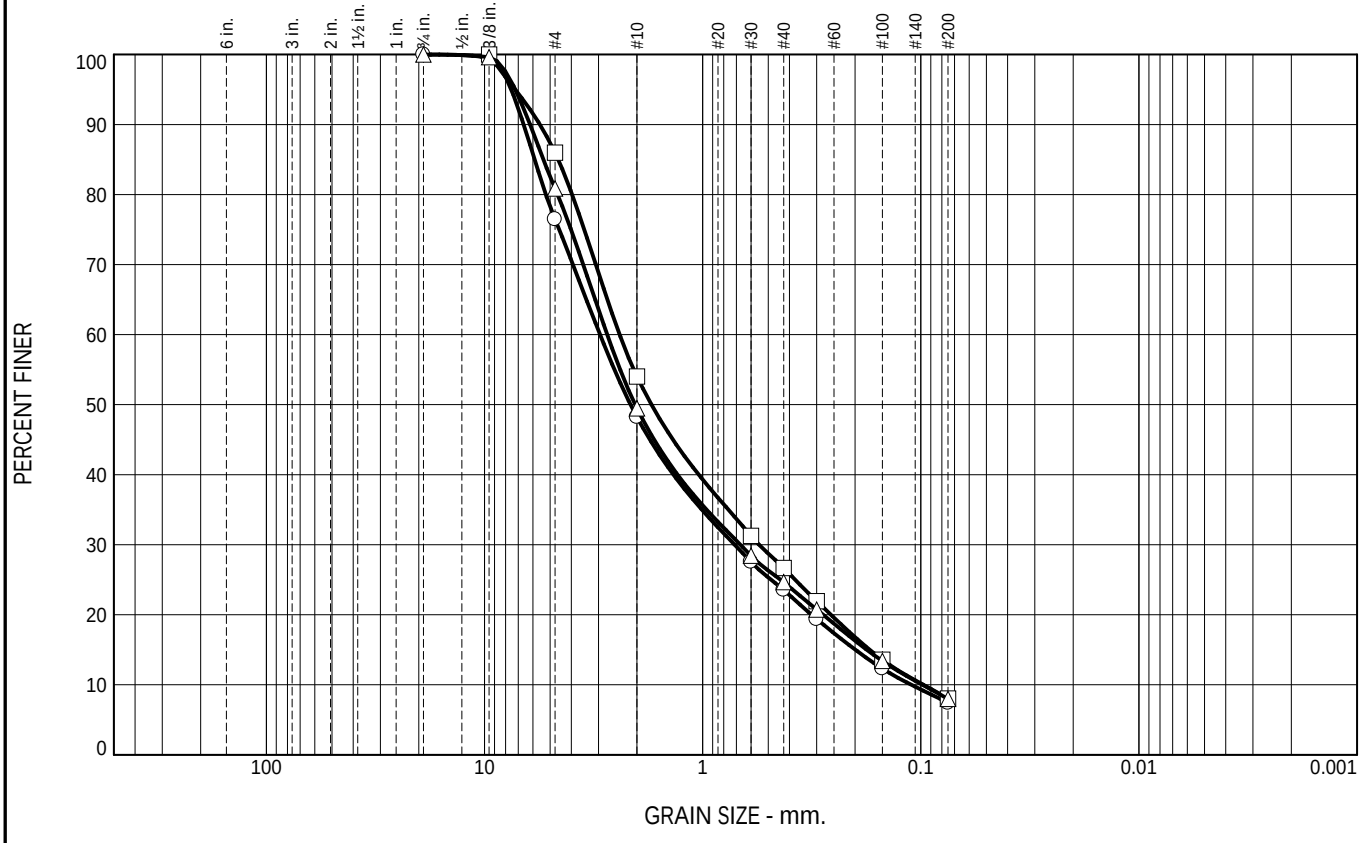
Laboratory Test Reports

Corrosivity Tests Summary

CTL # 1158-001 **Date:** 3/1/2022 **Tested By:** PJ **Checked:** PJ
Client: Provost and Pritchard **Project:** **Proj. No:** 03963-22-001
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%				Qualitative	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		E_H (mv)	At Test	by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
B-3	-	2-4	-	-	6,684	<2	13	0.0013	7.0	495	21	-	11.1	Reddish Brown Clayey SAND

Particle Size Distribution Report



	+3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PL	PI
○	0.0	23.5	69.1	7.4		SW-SM	26	27	NP
□	0.0	14.0	78.0	8.0					
△	0.0	19.1	72.9	8.0		SW-SM	26	25	1

SIEVE inches size	PERCENT FINER ○	□	△
3/4"	100.0		100.0
3/8"	99.6	100.0	99.6
	GRAIN SIZE		
D_{60}	2.9527	2.4014	2.7371
D_{30}	0.7136	0.5512	0.6716
D_{10}	0.1105	0.0973	0.0982
	COEFFICIENTS		
C_c	1.56	1.30	1.68
C_u	26.73	24.67	27.87

SIEVE number size	PERCENT FINER ○	□	△
#4	76.5	86.0	80.9
#10	48.2	54.0	49.5
#30	27.5	31.3	28.4
#40	23.5	26.7	24.7
#50	19.4	21.9	20.7
#100	12.3	13.6	13.4
#200	7.4	8.0	8.0

Material Description

○Brown Well-Graded SAND w/ Silt & Gravel

□Brown Well-Graded SAND w/ Silt

△Brown Well-Graded SAND w/ Silt & Gravel

REMARKS:

○

□

△

○Source of Sample: B-4 Depth: 33.5'

□Source of Sample: B-5 Depth: 36'

△Source of Sample: B-5 Depth: 43'

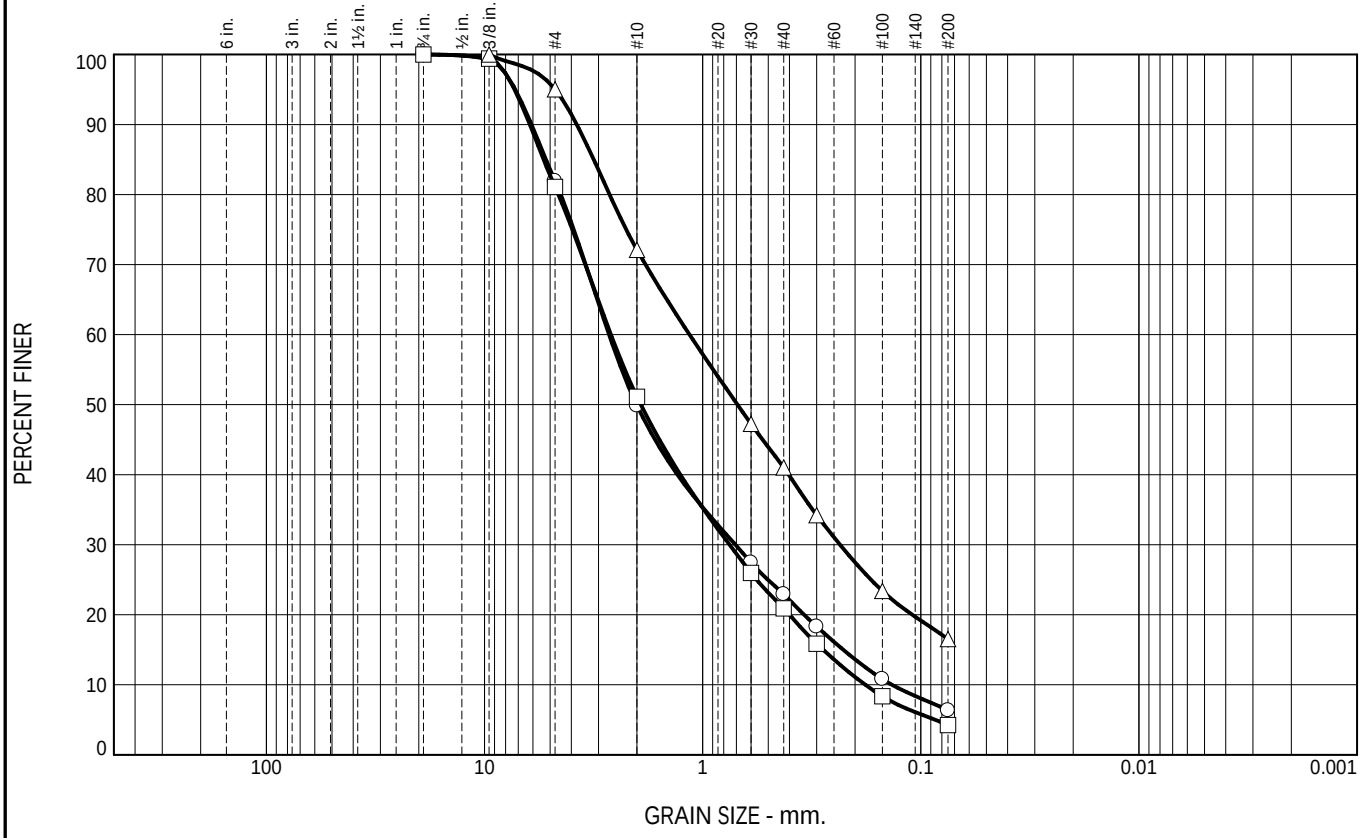
COOPER TESTING LABORATORY

Client: Provost & Pritchard

Project: Wine Cave-Project 8 - 03963-22-001

Project No.: 1158-001 Figure

Particle Size Distribution Report



	+3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PL	PI
○	0.0	18.1	75.5	6.4		SW-SM	27	27	NP
□	0.0	18.9	76.8	4.3		SW			
△	0.0	5.0	78.5	16.5		SM	26	23	3

SIEVE inches size	PERCENT FINER ○	□	△
3/4"	100.0	100.0	
3/8"	99.3	99.4	100.0
	GRAIN SIZE		
D_{60}	2.6843	2.6321	1.1484
D_{30}	0.7076	0.7525	0.2345
D_{10}	0.1355	0.1795	
	COEFFICIENTS		
C_c	1.38	1.20	
C_u	19.81	14.66	

SIEVE number size	PERCENT FINER ○	□	△
#4	81.9	81.1	95.0
#10	49.9	51.1	72.1
#30	27.4	26.0	47.3
#40	22.9	20.9	41.0
#50	18.3	15.9	34.2
#100	10.8	8.4	23.4
#200	6.4	4.3	16.5

Material Description

○Gray/Brown Mottled Well-Graded SAND w/ Silt & Gravel

□Brown Well-Graded SAND w/ Gravel

△Reddish Brown Silty SAND

REMARKS:

○

□

△

○Source of Sample: MW-1 Depth: 46.5'

□Source of Sample: B-2 Depth: 33'

△Source of Sample: B-3 Depth: 4.5'

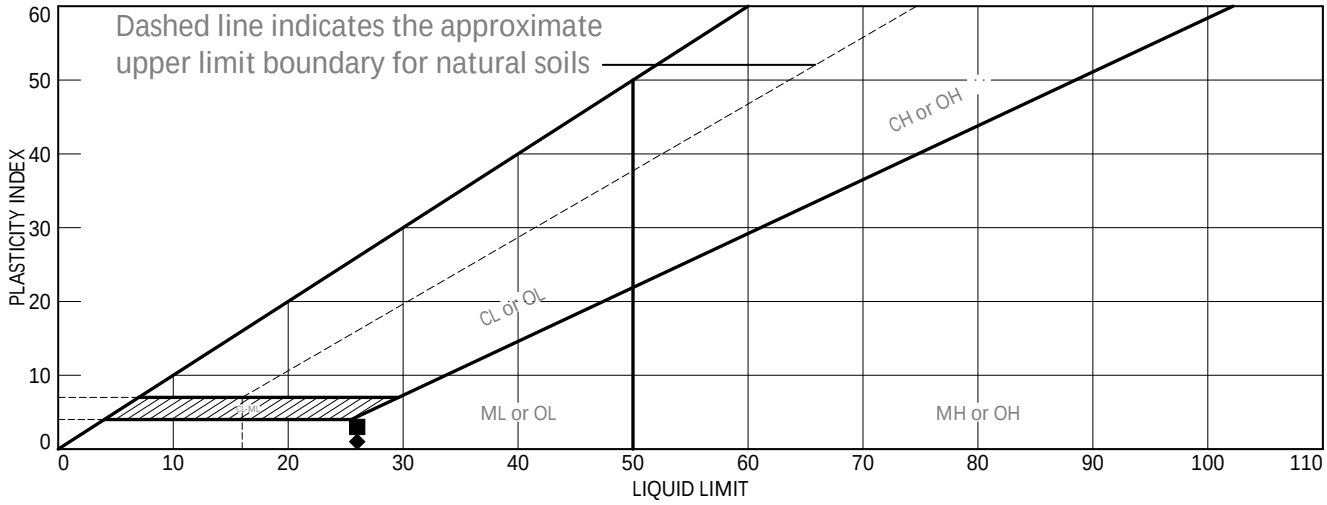
COOPER TESTING LABORATORY

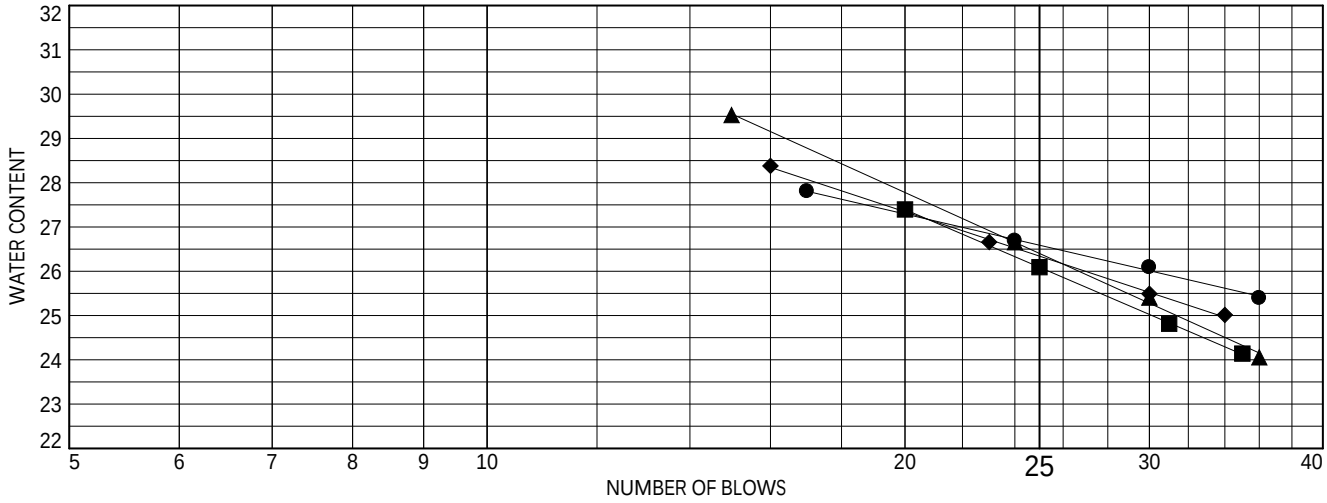
Client: Provost & Pritchard

Project: Wine Cave-Project 8 - 03963-22-001

Project No.: 1158-001 Figure

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Gray/Brown Mottled Well-Graded SAND w/ Silt & Gravel	27	27	NP	22.9	6.4	SW-SM
■	Reddish Brown Silty SAND	26	23	3	41.0	16.5	SM
▲	Brown Well-Graded SAND w/ Silt & Gravel	26	27	NP	23.5	7.4	SW-SM
◆	Brown Well-Graded SAND w/ Silt & Gravel	26	25	1	24.7	8.0	SW-SM

Project No. 1158-001 Client: Provost & Pritchard

Project: Wine Cave-Project 8 - 03963-22-001

●Source of Sample: MW-1 Depth: 46.5'

■Source of Sample: B-3 Depth: 4.5'

▲Source of Sample: B-4 Depth: 33.5'

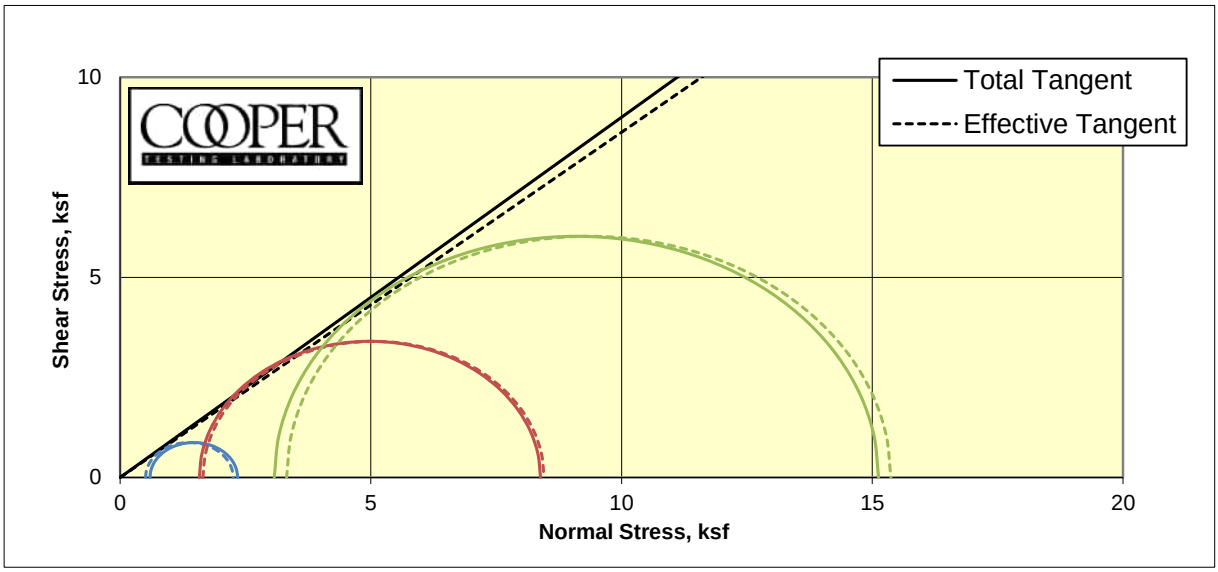
◆Source of Sample: B-5 Depth: 43'

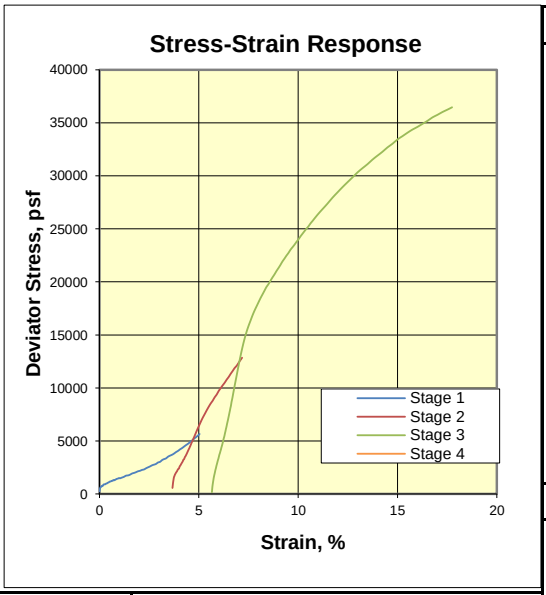
Remarks:

COOPER TESTING LABORATORY

Figure

Staged Consolidated Undrained Triaxial Compression with Pore Pressure
ASTM D4767m





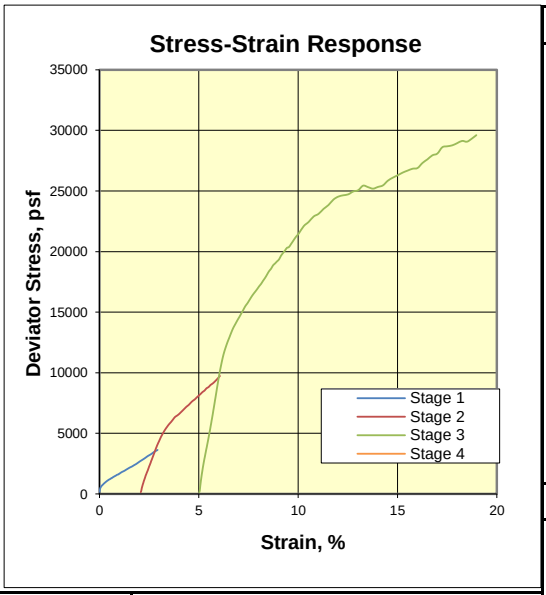
CTL Number:	1158-001
Client Name:	Provost & Prichard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	3/3/2022 By: MD/DC
Total C	0.000 ksf
Total phi	42.0 degrees
Eff. C	0.000 ksf
Eff. Phi	40.8 degrees ©

Remarks: Curved strength envelopes. Best fit line may overstate cohesion. To adjust phi and cohesion to the report go to the "Report" tab and in cells M18 through P19 enter end points for a line through the Mohr's circles. The points plotted can be changed on the "Shear Values" tab using cells B3, F3, and J3.

Stage	1	2	3	4
Boring	B-3			
Sample				
Depth	5			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	7.8			
Dry Density (pcf)	124.3			
Saturation (%)	59.2			
Void Ratio	0.356			
Diameter (in)	2.40			
Height (in)	5.03			
	Final			
MC (%)	13.0	12.3	11.8	
Dry Density (pcf)	124.9	126.6	127.8	
Saturation (%)	100.0	100.0	100.0	
Void Ratio	0.350	0.332	0.319	
Diameter (in)	2.40	2.43	2.44	
Height (in)	5.00	4.81	4.71	
Cell Pressure (psi)	103.4	110.2	120.7	
Back Pressure (psi)	99.2	99.3	99.4	
	Effective Stresses At:			
Strain (%)	1.5	1.5	1.5	
Deviator (ksf)	1.746	6.805	12.051	
Excess PP (psi)	0.6	-0.5	-1.7	
Sigma 1 (ksf)	2.254	8.454	15.371	
Sigma 3 (ksf)	0.507	1.650	3.319	
P (ksf)	1.381	5.052	9.345	
Q (ksf)	0.873	3.402	6.026	
Stress Ratio	4.442	5.124	4.631	
Rate (in/min)	0.0005	0.0005	0.0005	

Staged Consolidated Undrained Triaxial Compression with Pore Pressure
ASTM D4767m





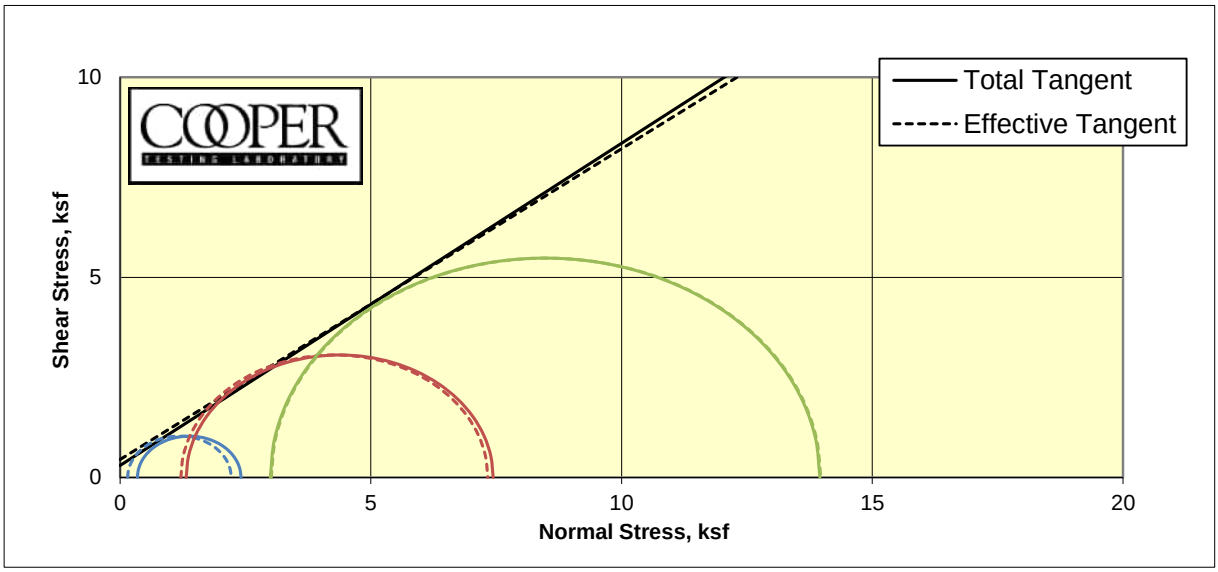
CTL Number:	1158-001
Client Name:	Provost and Pritchard
Project Name:	Wine Cave-Project 8
Project Number:	03963-22-001
Date:	3/3/2022 By: MD/DC

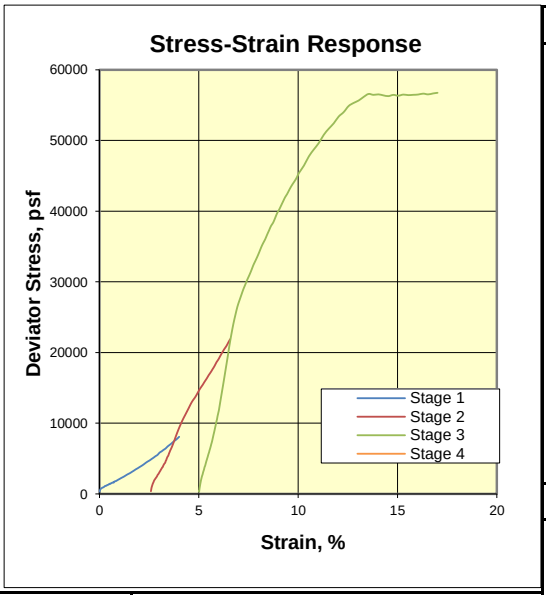
Total C	0.050	ksf
Total phi	36.8	degrees
Eff. C	0.150	ksf
Eff. Phi	40.7	degrees ©

Remarks: Curved strength envelopes. Best fit line may overstate cohesion. To adjust phi and cohesion to the report go to the "Report" tab and in cells M18 through P19 enter end points for a line through the Mohr's circles. The points plotted can be changed on the "Shear Values" tab using cells B3, F3, and J3.

Stage	1	2	3	4
Boring	B-4			
Sample				
Depth	33			
Visual Description	Grayish Brown & Yellowish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	7.8			
Dry Density (pcf)	137.8			
Saturation (%)	81.2			
Void Ratio	0.268			
Diameter (in)	2.43			
Height (in)	5.06			
	Final			
MC (%)	9.8	9.3	8.8	
Dry Density (pcf)	137.3	138.8	140.1	
Saturation (%)	100.0	100.0	100.0	
Void Ratio	0.274	0.260	0.248	
Diameter (in)	2.44	2.45	2.48	
Height (in)	5.03	4.93	4.78	
Cell Pressure (psi)	83.5	90.4	100.8	
Back Pressure (psi)	79.9	79.8	79.8	
	Effective Stresses At:			
Strain (%)	1.0	1.0	1.0	
Deviator (ksf)	1.660	4.539	9.283	
Excess PP (psi)	1.4	3.5	4.6	
Sigma 1 (ksf)	1.976	5.570	11.651	
Sigma 3 (ksf)	0.316	1.031	2.367	
P (ksf)	1.146	3.300	7.009	
Q (ksf)	0.830	2.270	4.642	
Stress Ratio	6.261	5.404	4.921	
Rate (in/min)	0.0005	0.0005	0.0005	

Staged Consolidated Undrained Triaxial Compression with Pore Pressure
ASTM D4767m





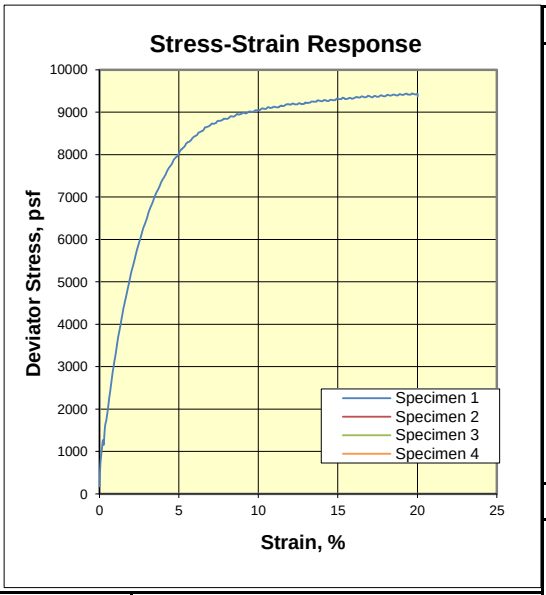
CTL Number:	1158-001
Client Name:	Provost and Pritchard
Project Name:	Wine Cave-Project 8
Project Number:	03963-22-001
Date:	3/3/2022 By: MD/DC
Total C	**0.300** ksf
Total phi	**38.8** degrees
Eff. C	**0.450** ksf
Eff. Phi	**37.8** degrees ©

Remarks: Curved strength envelopes. Best fit line may overstate cohesion. To adjust phi and cohesion to the report go to the "Report" tab and in cells M18 through P19 enter end points for a line through the Mohr's circles. The points plotted can be changed on the "Shear Values" tab using cells B3, F3, and J3.

Stage	**1**	**2**	**3**	**4**
Boring	MW-1			
Sample				
Depth	47			
Visual Description	Grayish Brown & Yellowish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	8.5			
Dry Density (pcf)	133.6			
Saturation (%)	77.4			
Void Ratio	0.308			
Diameter (in)	2.44			
Height (in)	5.05			
	Final			
MC (%)	10.7	9.9	9.5	
Dry Density (pcf)	134.6	136.8	138.0	
Saturation (%)	100.0	100.0	100.0	
Void Ratio	0.299	0.278	0.267	
Diameter (in)	2.43	2.44	2.46	
Height (in)	5.05	4.92	4.80	
Cell Pressure (psi)	93.4	100.1	111.2	
Back Pressure (psi)	91.0	91.0	90.4	
	Effective Stresses At:			
Strain (%)	1.0	1.0	1.0	
Deviator (ksf)	2.065	6.123	10.961	
Excess PP (psi)	1.4	0.7	-0.1	
Sigma 1 (ksf)	2.215	7.333	13.974	
Sigma 3 (ksf)	0.150	1.210	3.013	
P (ksf)	1.182	4.272	8.493	
Q (ksf)	1.032	3.061	5.481	
Stress Ratio	14.783	6.058	4.639	
Rate (in/min)	0.0005	0.0005	0.0005	

Unconsolidated Undrained Triaxial Compression
ASTM D2850



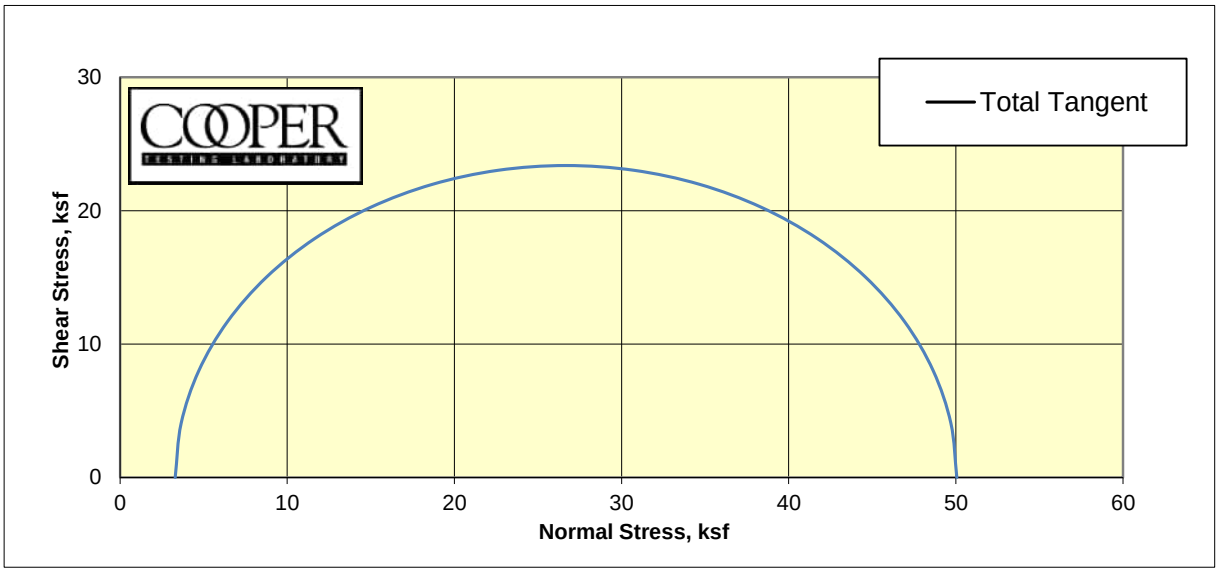


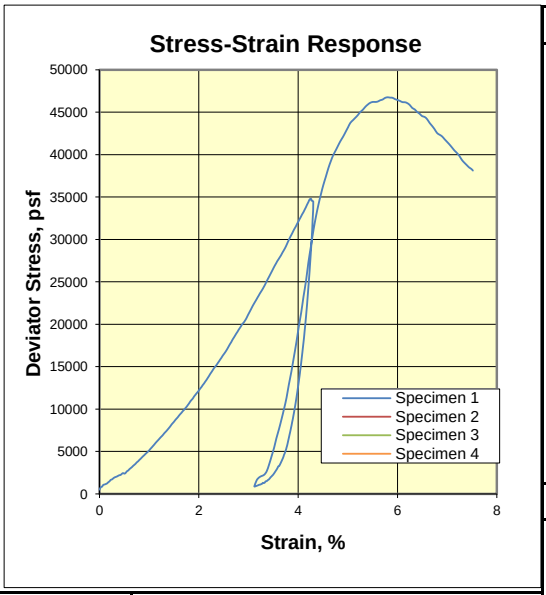
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	3/4/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees

©

Specimen	1	2	3	4
Boring	B-2			
Sample				
Depth	15.5'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	12.8			
Dry Density (pcf)	112.1			
Saturation (%)	68.4			
Void Ratio	0.503			
Diameter (in)	2.38			
Height (in)	5.00			
	Final			
MC (%)	12.8			
Dry Density (pcf)	112.1			
Saturation (%)	68.4			
Void Ratio	0.503			
Diameter (in)	2.38			
Height (in)	5.00			
Cell Pressure (psi)	38.2			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	15.0			
Deviator (ksf)	9.323			
Excess PP (psi)				
Sigma 1 (ksf)	14.826			
Sigma 3 (ksf)	5.503			
P (ksf)	10.164			
Q (ksf)	4.661			
Stress Ratio	2.694			
Rate (in/min)	0.0250			

Unconsolidated Undrained Triaxial Compression
ASTM D2850





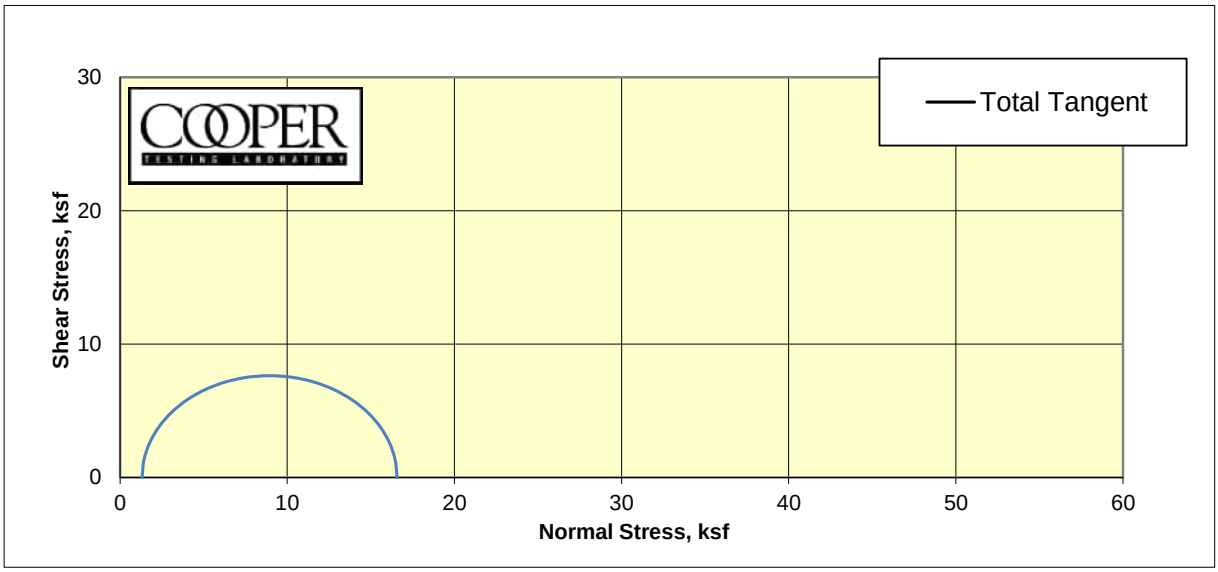
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/28/2022 By: MD/DC

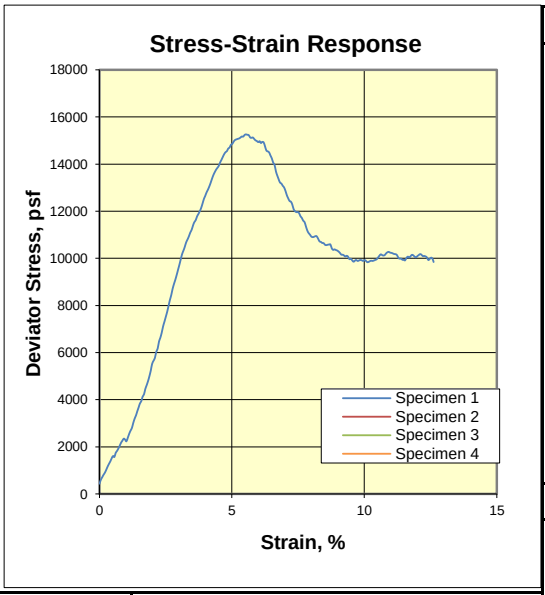
Total C	#DIV/0!	ksf
Total phi	#DIV/0!	degrees
Eff. C	N/A	ksf
Eff. Phi	N/A	degrees ©

Remarks: Sample loaded to 35000psf deviator stress, unloaded to 300psf deviator stress, and then sheared.

Specimen	1	2	3	4
Boring	B-2			
Sample				
Depth	32.5'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	4.6			
Dry Density (pcf)	145.1			
Saturation (%)	76.4			
Void Ratio	0.161			
Diameter (in)	2.44			
Height (in)	5.01			
	Final			
MC (%)	4.6			
Dry Density (pcf)	145.1			
Saturation (%)	76.4			
Void Ratio	0.161			
Diameter (in)	2.44			
Height (in)	5.01			
Cell Pressure (psi)	22.9			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	5.8			
Deviator (ksf)	46.763			
Excess PP (psi)				
Sigma 1 (ksf)	50.058			
Sigma 3 (ksf)	3.295			
P (ksf)	26.677			
Q (ksf)	23.382			
Stress Ratio	15.192			
Rate (in/min)	0.0243			

Unconsolidated Undrained Triaxial Compression
ASTM D2850



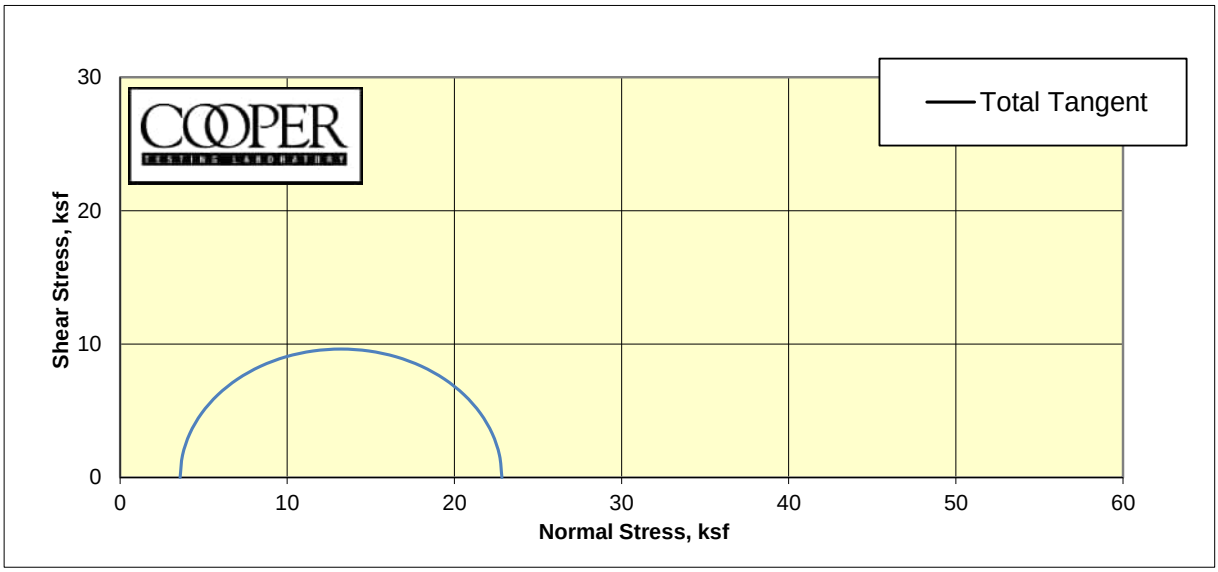


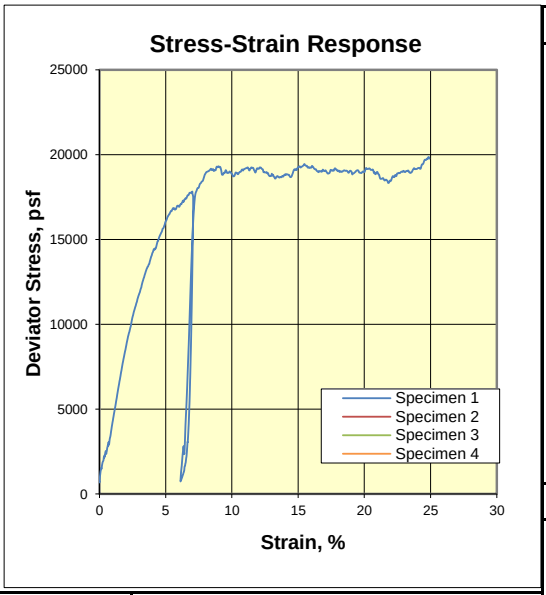
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	3/4/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees

©

Specimen	1	2	3	4
Boring	B-3			
Sample				
Depth	12.5'			
Visual Description	Grayish Brown & Yellowish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	5.8			
Dry Density (pcf)	139.3			
Saturation (%)	74.9			
Void Ratio	0.210			
Diameter (in)	2.45			
Height (in)	4.99			
	Final			
MC (%)	5.8			
Dry Density (pcf)	139.3			
Saturation (%)	74.9			
Void Ratio	0.210			
Diameter (in)	2.45			
Height (in)	4.99			
Cell Pressure (psi)	9.1			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	5.5			
Deviator (ksf)	15.259			
Excess PP (psi)				
Sigma 1 (ksf)	16.571			
Sigma 3 (ksf)	1.311			
P (ksf)	8.941			
Q (ksf)	7.630			
Stress Ratio	12.639			
Rate (in/min)	0.0249			

Unconsolidated Undrained Triaxial Compression
ASTM D2850



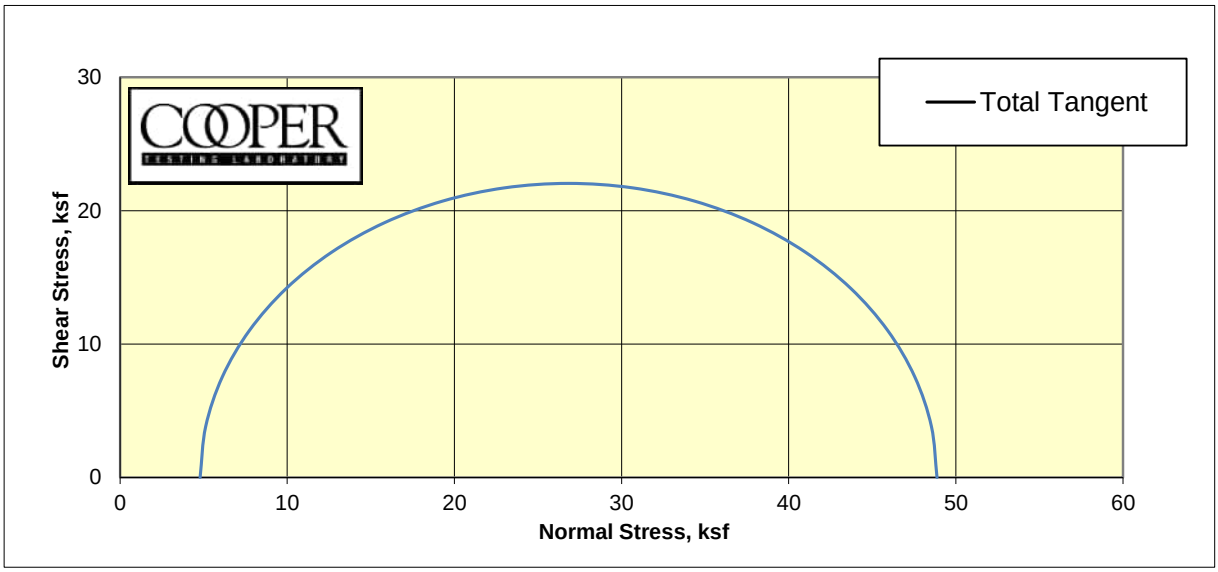


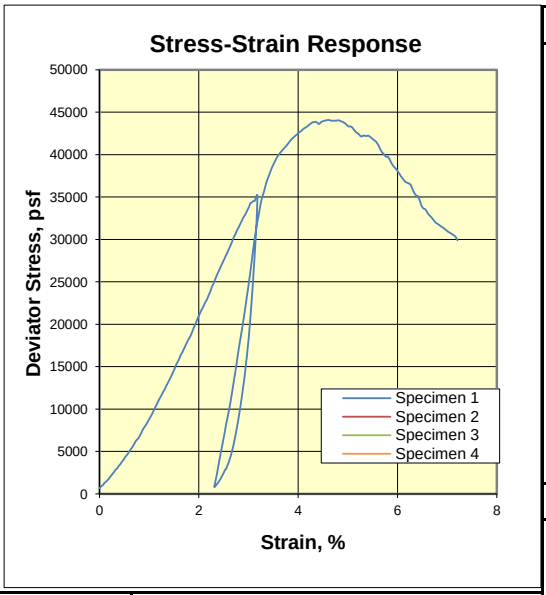
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/28/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees ©

Remarks: Sample loaded to 17000psf deviator stress, unloaded to 300psf deviator stress, and then sheared. Sample wasn't loaded all the way to the requested 35000psf prior to unload due to the stress strain curve suggesting the sample was close to peak deviator.

Specimen	1	2	3	4
Boring	B-3			
Sample				
Depth	36'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	6.0			
Dry Density (pcf)	141.8			
Saturation (%)	85.7			
Void Ratio	0.189			
Diameter (in)	2.43			
Height (in)	5.02			
	Final			
MC (%)	6.0			
Dry Density (pcf)	141.8			
Saturation (%)	85.7			
Void Ratio	0.189			
Diameter (in)	2.43			
Height (in)	5.02			
Cell Pressure (psi)	24.9			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	15.0			
Deviator (ksf)	19.254			
Excess PP (psi)				
Sigma 1 (ksf)	22.842			
Sigma 3 (ksf)	3.587			
P (ksf)	13.214			
Q (ksf)	9.627			
Stress Ratio	6.367			
Rate (in/min)	0.0236			

Unconsolidated Undrained Triaxial Compression
ASTM D2850



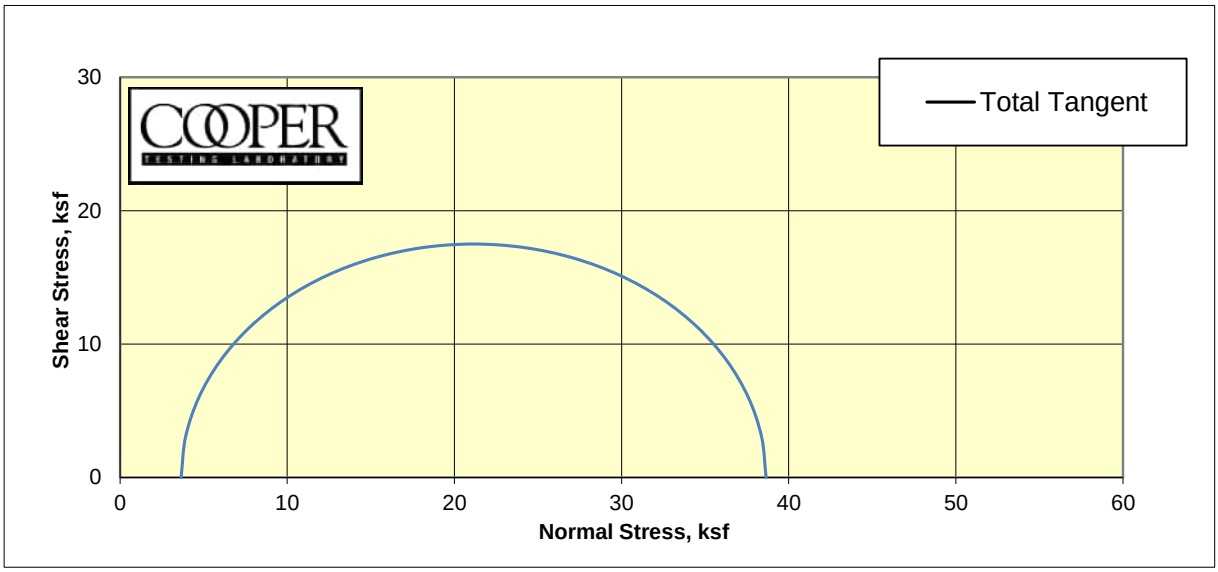


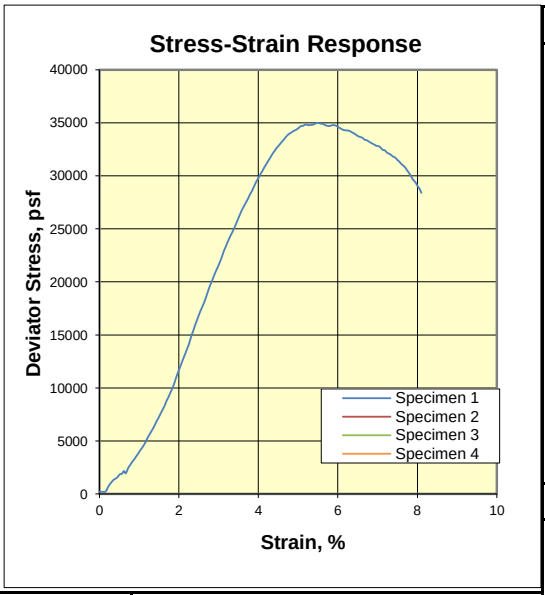
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/28/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees ©

Remarks: Sample loaded to 35000psf deviator stress, unloaded to 300psf deviator stress, and then sheared.

Specimen	1	2	3	4
Boring	B-4			
Sample				
Depth	48'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	4.3			
Dry Density (pcf)	143.1			
Saturation (%)	66.0			
Void Ratio	0.178			
Diameter (in)	2.45			
Height (in)	5.00			
	Final			
MC (%)	4.3			
Dry Density (pcf)	143.1			
Saturation (%)	66.0			
Void Ratio	0.178			
Diameter (in)	2.45			
Height (in)	5.00			
Cell Pressure (psi)	33.2			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	4.6			
Deviator (ksf)	44.089			
Excess PP (psi)				
Sigma 1 (ksf)	48.873			
Sigma 3 (ksf)	4.784			
P (ksf)	26.829			
Q (ksf)	22.044			
Stress Ratio	10.215			
Rate (in/min)	0.0244			

Unconsolidated Undrained Triaxial Compression
ASTM D2850

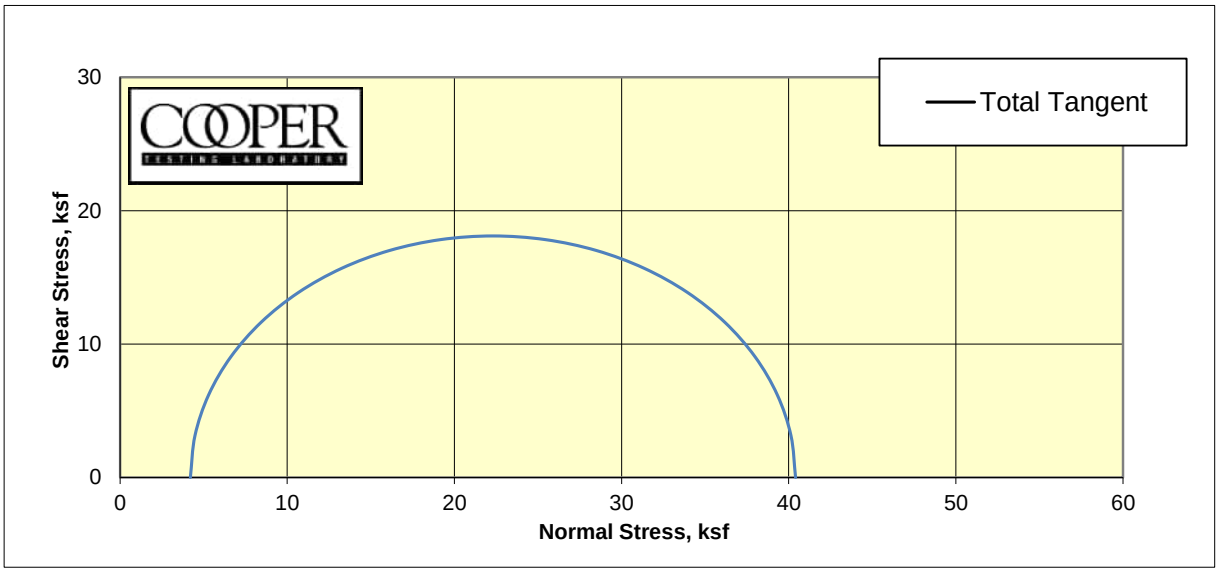


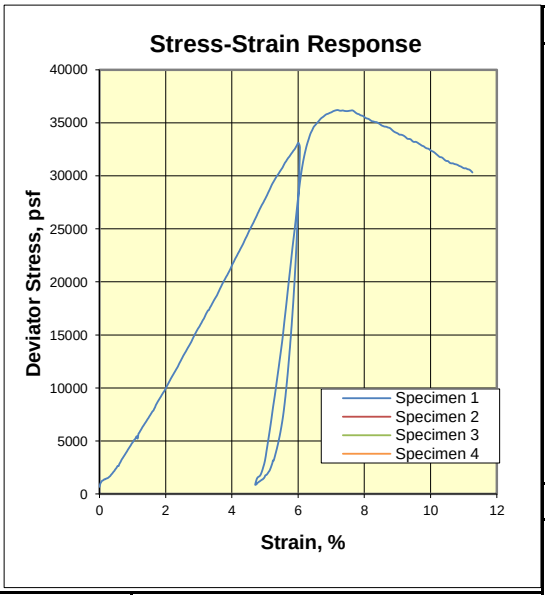


CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	3/4/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees ©

Specimen	1	2	3	4
Boring	B-5			
Sample				
Depth	35.5'			
Visual Description	Grayish Brown & Yellowish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	6.2			
Dry Density (pcf)	140.7			
Saturation (%)	84.1			
Void Ratio	0.198			
Diameter (in)	2.45			
Height (in)	5.00			
	Final			
MC (%)	6.2			
Dry Density (pcf)	140.7			
Saturation (%)	84.1			
Void Ratio	0.198			
Diameter (in)	2.45			
Height (in)	5.00			
Cell Pressure (psi)	25.3			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	5.5			
Deviator (ksf)	34.996			
Excess PP (psi)				
Sigma 1 (ksf)	38.645			
Sigma 3 (ksf)	3.649			
P (ksf)	21.147			
Q (ksf)	17.498			
Stress Ratio	10.590			
Rate (in/min)	0.0250			

Unconsolidated Undrained Triaxial Compression
ASTM D2850



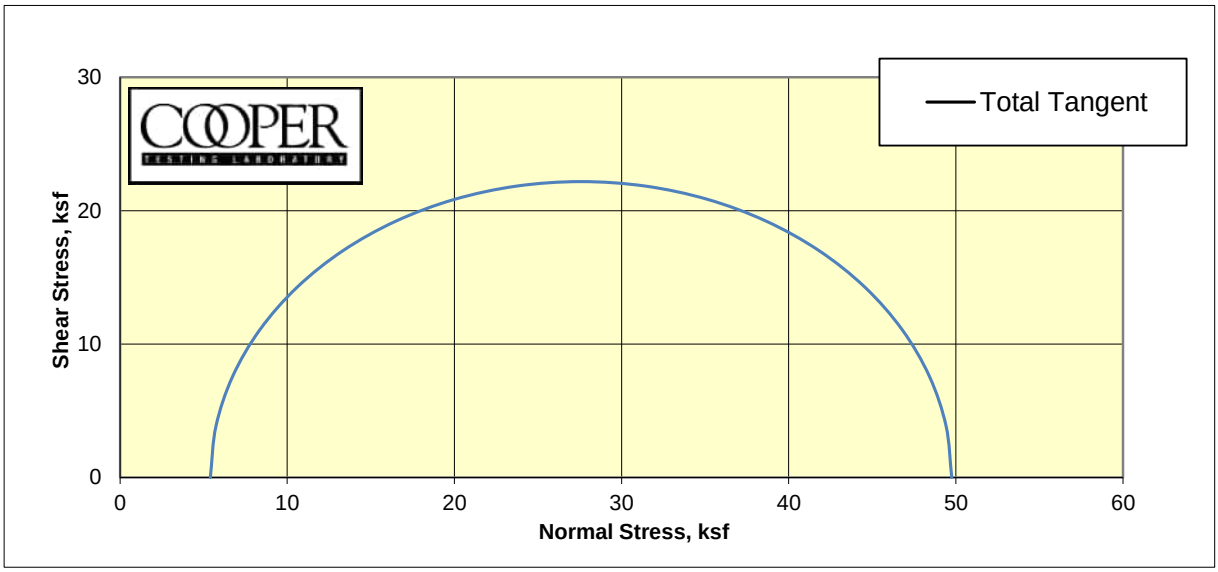


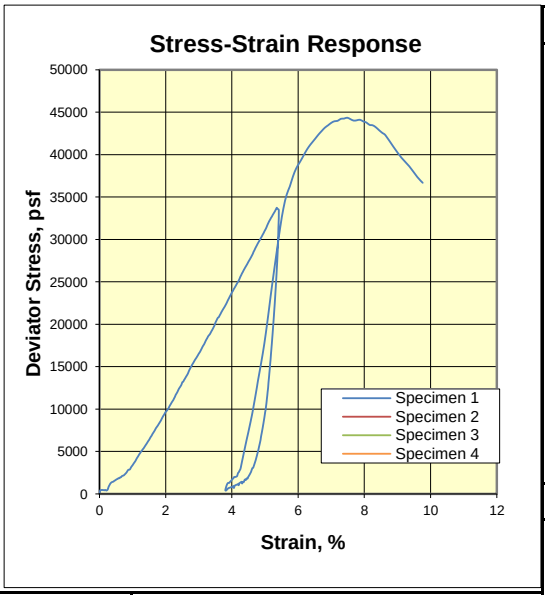
CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/28/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees ©

Remarks: Sample loaded to 35000psf deviator stress, unloaded to 300psf deviator stress, and then sheared.

Specimen	1	2	3	4
Boring	B-5			
Sample				
Depth	42'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	6.6			
Dry Density (pcf)	141.8			
Saturation (%)	94.4			
Void Ratio	0.189			
Diameter (in)	2.45			
Height (in)	5.00			
	Final			
MC (%)	6.6			
Dry Density (pcf)	141.8			
Saturation (%)	94.4			
Void Ratio	0.189			
Diameter (in)	2.45			
Height (in)	5.00			
Cell Pressure (psi)	29.2			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	7.2			
Deviator (ksf)	36.207			
Excess PP (psi)				
Sigma 1 (ksf)	40.410			
Sigma 3 (ksf)	4.203			
P (ksf)	22.306			
Q (ksf)	18.104			
Stress Ratio	9.615			
Rate (in/min)	0.0238			

Unconsolidated Undrained Triaxial Compression
ASTM D2850





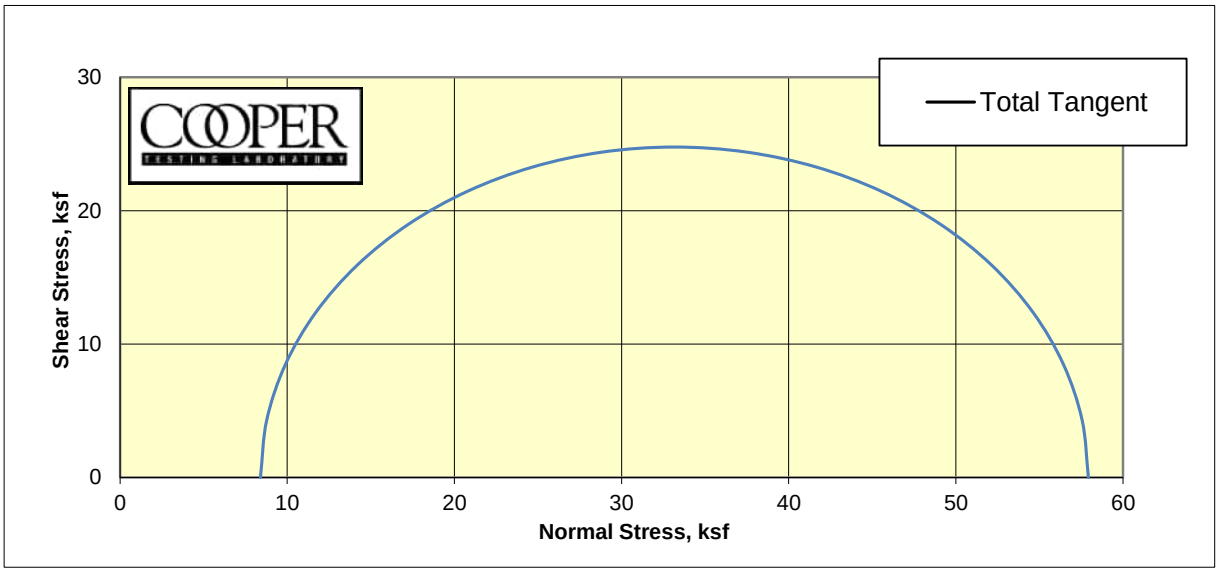
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Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/28/2022 By: MD/DC

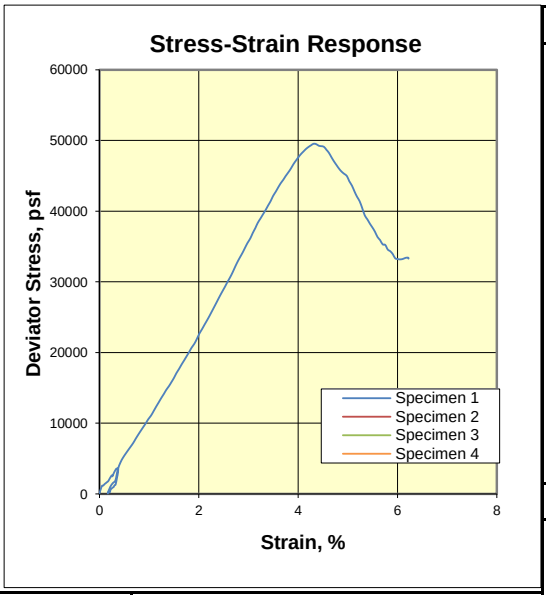
Total C	#DIV/0!	ksf
Total phi	#DIV/0!	degrees
Eff. C	N/A	ksf
Eff. Phi	N/A	degrees ©

Remarks: Sample loaded to 35000psf deviator stress, unloaded to 300psf deviator stress, and then sheared.

Specimen	1	2	3	4
Boring	MW-1			
Sample				
Depth	54'			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	6.3			
Dry Density (pcf)	138.6			
Saturation (%)	79.3			
Void Ratio	0.216			
Diameter (in)	2.44			
Height (in)	5.00			
	Final			
MC (%)	6.3			
Dry Density (pcf)	138.6			
Saturation (%)	79.3			
Void Ratio	0.216			
Diameter (in)	2.44			
Height (in)	5.00			
Cell Pressure (psi)	37.5			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	7.5			
Deviator (ksf)	44.356			
Excess PP (psi)				
Sigma 1 (ksf)	49.753			
Sigma 3 (ksf)	5.397			
P (ksf)	27.575			
Q (ksf)	22.178			
Stress Ratio	9.219			
Rate (in/min)	0.0241			

Unconsolidated Undrained Triaxial Compression
ASTM D2850





CTL Number:	1158-001
Client Name:	Provost & Pritchard
Project Name:	Wine Cave - Project 8
Project Number:	03963-22-001
Date:	2/14/2022 By: MD/DC
Total C	#DIV/0! ksf
Total phi	#DIV/0! degrees
Eff. C	N/A ksf
Eff. Phi	N/A degrees ©

Remarks: Sample loaded to 3000psf deviator stress, unloaded to 300psf deviator stress, and then sheared.

Specimen	1	2	3	4
Boring	MW-1			
Sample				
Depth	83.5			
Visual Description	Grayish Brown & Reddish Brown SAND w/ Gravel (Weathered rock)			
MC (%)	5.1			
Dry Density (pcf)	141.6			
Saturation (%)	71.6			
Void Ratio	0.190			
Diameter (in)	2.46			
Height (in)	5.02			
	Final			
MC (%)	5.1			
Dry Density (pcf)	141.6			
Saturation (%)	71.6			
Void Ratio	0.190			
Diameter (in)	2.46			
Height (in)	5.02			
Cell Pressure (psi)	58.3			
Back Pressure (psi)	0.0			
	Total Stresses At:			
Strain (%)	4.3			
Deviator (ksf)	49.537			
Excess PP (psi)				
Sigma 1 (ksf)	57.931			
Sigma 3 (ksf)	8.394			
P (ksf)	33.163			
Q (ksf)	24.768			
Stress Ratio	6.901			
Rate (in/min)	0.0250			

APPENDIX J

YOUNGDAHL CONSULTING GROUP, INC.
ESTABLISHED 1984
1234 Glenhaven Court, El Dorado Hills, CA 95762
4300 Anthony Court, Unit D, Rocklin, CA 95677
ph 916.933.0633 fx 916.933.6482
www.youngdahl.net

Mima Capital LLC
4120 Douglas Blvd, #306-175
Granite Bay, California, 95746

Project No. E22116.000
29 March 2022

Subject: **CALLISON ROAD (7615)**
7615 Callison Road, Penryn, California
SLOPE STABILITY STUDY FOR SEPTIC LEACH FIELD

Attention: Mr. Evan Mackenzie

References:
1. Septic Evaluation Report for 7615 Callison Road, prepared by Lindbloom Septic Design, Inc., dated 27 January 2022
2. Leach Field Area Plan, prepared by Marc Lindbloom
3. Executed Proposal and Contract for Callison Road (7615), prepared by Youngdahl Consulting Group, Inc., dated 28 February 2022

Dear Mr. Mackenzie:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has prepared this slope stability study for the project site located at 7615 Callison Road in Penryn, California. The purpose of this study was to prepare a site-specific slope stability report that evaluates if the future installation of an on-site septic system with a leach field on this slope adversely affects the slope stability. To complete this evaluation, our firm completed a subsurface exploration engineering analysis in preparation for this report in accordance with the Reference 3 contract. The vicinity map provided on Figure A-1, Appendix A shows the approximate project location.

Project Understanding
The proposed leach field will be located on a slope that exceeds 30 percent. According to the Placer County Department of Environmental Health, such a septic system requires a slope stability study prior to approval.

If studies or plans pertaining to the site exist and are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

Purpose and Scope
Youngdahl Consulting Group, Inc. has prepared this report to address geotechnical engineering considerations related to the installation of the septic leach field on the site. The following scope of services were developed and performed for preparation of this report:

- A review of geotechnical and geologic data available to us at the time of our study;
- Performance of a field study consisting of a site reconnaissance and subsurface explorations to observe and characterize the subsurface conditions;
- Laboratory testing on representative samples collected during our field study;
- Evaluation of the data and slope stability assessment based on information obtained from our field study and, laboratory testing;
- Preparation of this report summarizing our findings and conclusions regarding the above-described information.

Surface Observations
The project site is located at 7615 Callison Road in Penryn. The project is bounded by a railroad to the north, a proposed parking lot to the south and undeveloped land to the east west. Topography at the site slopes down towards the north at varying gradients with a maximum gradient of approximately 3H:1V (Horizontal:Vertical). At the time of our visit on 2 March 2022, the vegetation at the site consisted of grasses and mature trees. No indications of slope instability were noted across the proposed leach field area.

Subsurface Conditions
Our field study included a site reconnaissance by a representative of our firm and a subsurface exploration program. The exploration program included the excavation of 3 test pits to evaluate the near surface soils conditions and the depth to rock. The approximate locations of the test pits are presented on Figure A-2, Appendix A.

The subsurface soil conditions at the site appeared to consist of a thin layer of native soils overlying rock. The soils generally consisted of silty sand soils overlying shallow weathered granitic bedrock. The soil profile, in-situ density and moistures measured in our test pits is presented in Figures A-3 through A-5, Appendix A.

Laboratory Testing
Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil and bedrock underlying the site. A description of the test performed for this project and the associated test results are presented in Appendix B. The parameters used in our slope stability analysis are presented in Table 2. In summary, the following test was performed for the preparation of this report:

Table 1: Laboratory Testing

Laboratory Test	Test Standard	Summary of Results	
Direct Shear	ASTM D3080	TP @ 1.5-2’	Φ = 39.9°, c = 0 psf (Remolded to field measured density and moisture content)

Table 2: Soil and Rock Values

Material	Description	Friction Angle (Deg)	Cohesion (psf)	Unit Weight (pcf)
Soil	Native Soil	39.9	0	105.6
KJpd (Penryn Pluton)	Completely weathered quartz diorite	43	0	150

Modeling Methods and Results of the Analyses
Slope stability modeling was performed using Slide2 software developed by RocScience. For the purpose of our evaluation, we elected to evaluate the slope using the Spencer and Generalized Limit Equilibrium/Mortensen-Price (GLE) methods as these are computer generated methods to satisfy vertical force, horizontal force, and moments in the calculation process. The results for these two methods were relatively similar and the results have been included as an attachment in this report. Additionally, the slope condition was evaluated under both static and seismic loadings.

In assessing the slope conditions for stability, we did not consider cohesion in the calculations to evaluate the existing soil and rock conditions to obtain a worst-case scenario factor of safety (FS). Using the parameters in the Soil and Rock Values table above, and with the Spencer and GLE methods, the analyses produced FS values of 1.582 and 1.581, respectively for a static loading. The analyses produced FS values of 1.211 and 1.211, respectively for a seismic loading.

Conclusions and Recommendations

The proposed septic leach field area was observed to be moderately sloping to the southwest at an approximate gradient of 3H:1V with a dense covering of grasses and trees. Based on the modelled slope stability scenario generated from the parameters above and modified soil parameters that provided a conservative FS value, a minimum FS value of 1.5 was obtained. Our analysis revealed that the slope would remain stable under saturated condition with the soil and rock conditions observed in the test pits for proposed leach field area. Please do not hesitate to contact us should you have any questions regarding our slope stability assessment.

Very truly yours,
Youngdahl Consulting Group, Inc.

Reviewed By:



Pavel Fomin
Staff Engineer

Martha A. McDonnell, P.E.
Associate Engineer

4-8-22

Distribution: PDF to Client
Attachments: Figures
Slope Stability Analysis Results

APPENDIX A

Field Study

Vicinity Map
Site Plan
Logs of Exploratory Test Pits
Soil Classification Chart and Log Explanation

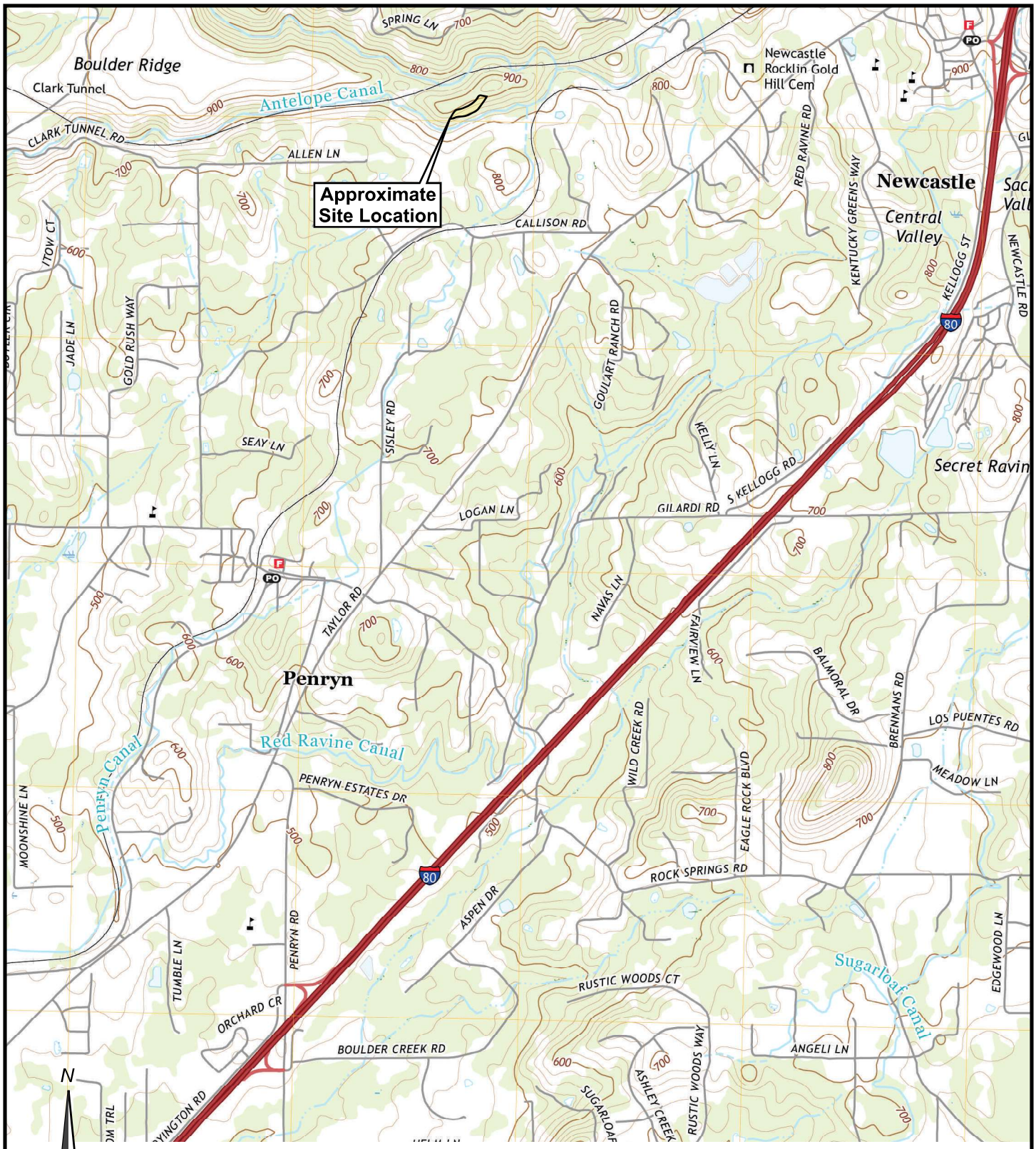
Introduction

The contents of this appendix shall be integrated with the Slope Stability Study of which it is a part of. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Our field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 2 March 2022, which included the excavation of 3 test pits under his direction at the approximate locations shown on Figure A-2, this Appendix. Excavation of the test pits was accomplished with a Caterpillar 315 excavator equipped with a 24-inch-wide bucket. The bulk and bag samples collected from the test pits were returned to our laboratory for further examination and testing.

The Exploratory Test Pit Logs describe the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradual, our logs indicate the average contact depth. Our logs also graphically indicate the sample type, sample number, and approximate depth of each soil sample obtained from the test pits.

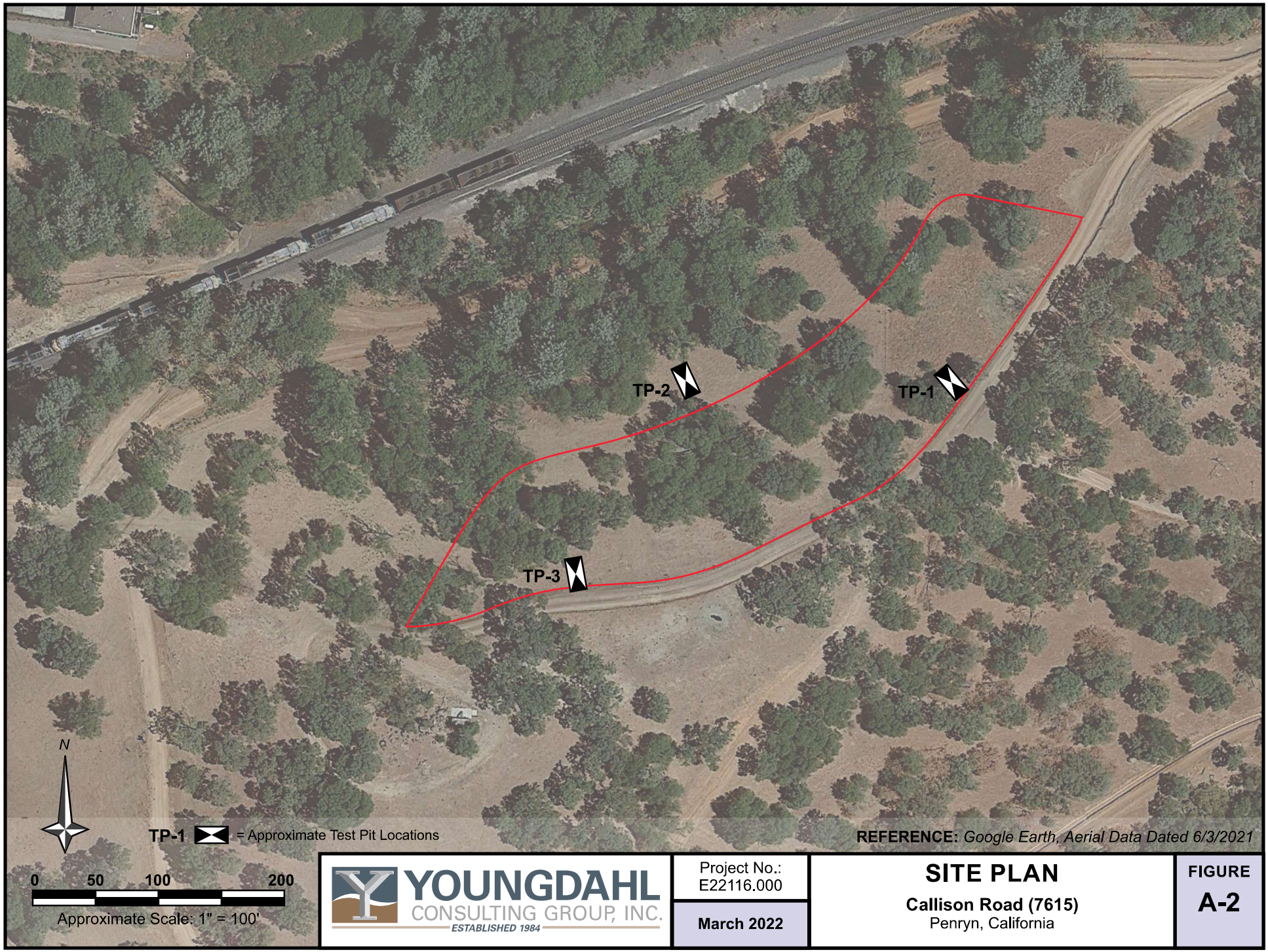
The soils encountered were logged during excavation and provide the basis for the "Logs of Test Pits", Figures A-3 through A-5, this Appendix. These logs show a graphic representation of the



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Rocklin Quadrangle, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E22116.000	**VICINITY MAP** **Callison Road (7615)** Penryn, California	**FIGURE A-1**
	March 2022		



YOUNGDAHL CONSULTING GROUP, INC.
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Project No.: E22116.000

March 2022

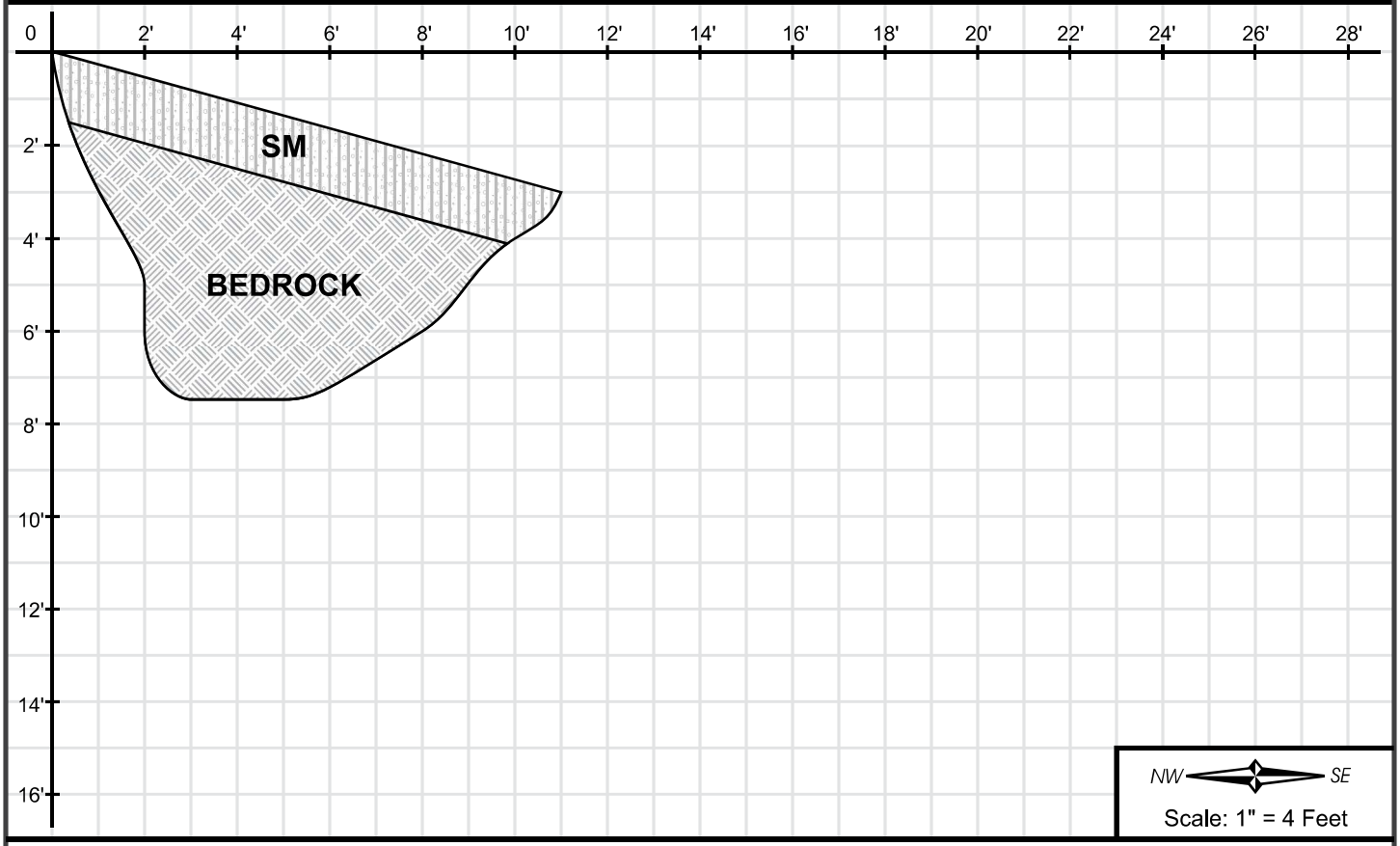
SITE PLAN

Callison Road (7615)
Penryn, California

FIGURE
A-2

Logged By: **PF**	Date: **2 March 2022**	Lat / Lon: **N 38.861610° / W 121.158897°**		Pit No. **TP-1**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **320°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1.5'	Olive brown silty **SAND (SM)**, medium dense to dense, slightly moist to moist	**TP-1** @ 0-1.5'	DD: 103.3 pcf M: 13.7%
@ 1.5' - 6'	Red brown to yellow brown **BEDROCK**, highly weathered, moderately soft, moist		DD: 96.1 pcf M: 21.6%
@ 6' - 7.5'	*Grades with grey*		DD: 112.8 pcf M: 16.2%
	Test pit terminated at 7.5' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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Project No.: E22116.000

March 2022

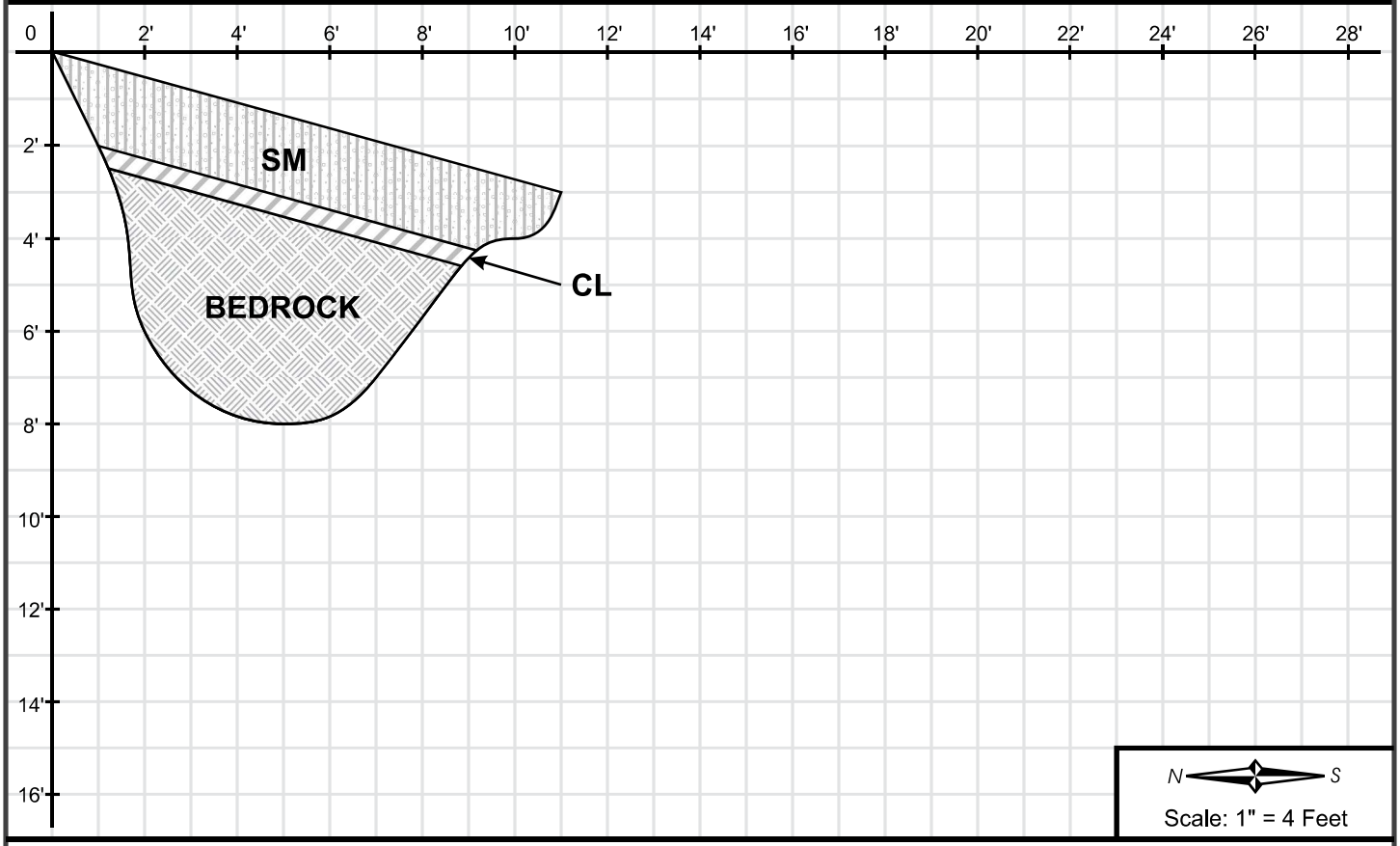
EXPLORATORY TEST PIT LOG

Callison Road (7615)
Penryn, California

FIGURE **A-3**

Logged By: **PF**	Date: **2 March 2022**	Lat / Lon: **N 38.871617° / W 121.159644°**		Pit No. **TP-2**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **335°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Brown to yellow brown silty **SAND (SM)**, medium to dense, slightly moist to moist		DD: 105.3 pcf M: 10.4%
@ 2' - 2.5'	Red yellow to olive yellow sandy **CLAY (CL)**, stiff, moist		DD: 98.9 pcf M: 24.7%
@ 2.5' - 4'	Red yellow **BEDROCK**, highly weathered, moderately hard, slightly moist		DD: 107.4 pcf M: 12.4%
@ 4' - 8'	*Grades red yellow to pink, dry*		
	Test pit terminated at 8' No free groundwater encountered No caving noted		

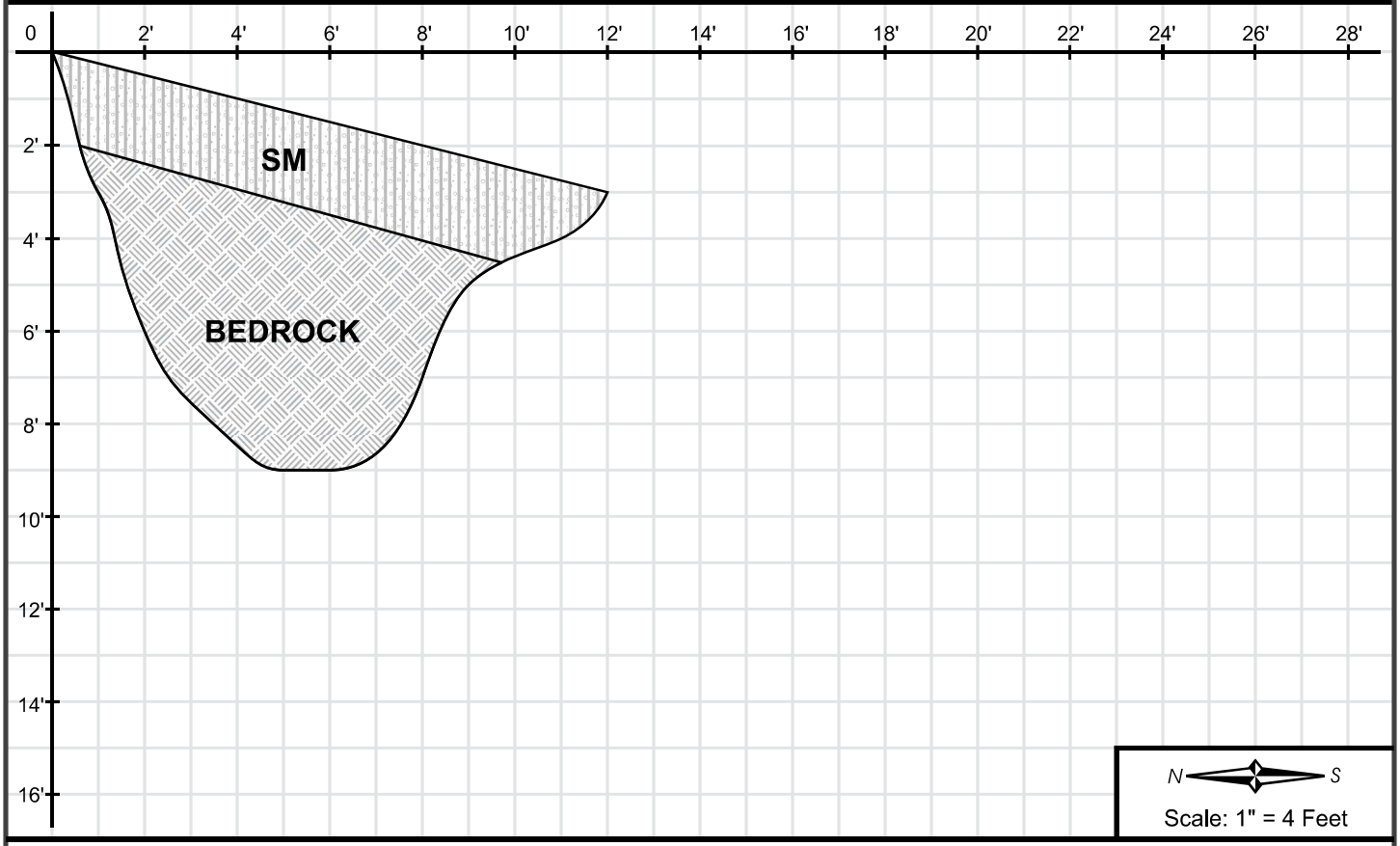


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E22116.000 **March 2022**	**EXPLORATORY TEST PIT LOG** **Callison Road (7615)** Penryn, California	**FIGURE A-4**

Logged By: **PF**	Date: **2 March 2022**	Lat / Lon: **N 38.87110° / W 121.159958°**		Pit No. **TP-3**
Equipment: **CAT 315 with 24" Bucket**		Pit Orientation: **350°**	Elevation: **~**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 2'	Olive brown silty **SAND (SM)**, medium dense, dry to slightly moist		DD: 108.3 pcf M: 12.3%
@ 2' - 5.5'	Red brown to yellow brown **BEDROCK**, highly weathered, moderately soft, slightly moist		DD: 103.5 pcf M: 14.8%
@ 5.5' - 9'	*Grades grey, moderately hard*		DD: 115.4 pcf M: 16.7%
	Test pit terminated at 9' No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

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Project No.: E22116.000

March 2022

EXPLORATORY TEST PIT LOG

Callison Road (7615)
Penryn, California

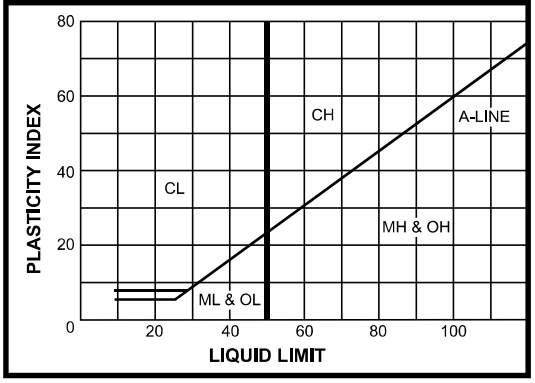
FIGURE **A-5**

UNIFIED SOIL CLASSIFICATION SYSTEMS

MAJOR DIVISION			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS Over 50% > #200 sieve	GRAVELS Over 50% > #4 sieve	Clean **GRAVELS** With Little Or No Fines	GW	Well graded **GRAVELS**, **GRAVEL-SAND** mixtures
			GP	Poorly graded **GRAVELS**, **GRAVEL-SAND** mixtures
		GRAVELS With Over 12% Fines	GM	Silty **GRAVELS**, poorly graded **GRAVEL-SAND-SILT** mixtures
			GC	Clayey **GRAVELS**, poorly graded **GRAVEL-SAND-CLAY** mixtures
	SANDS Over 50% < #4 sieve	Clean **SANDS** With Little Or No Fines	SW	Well graded **SANDS**, gravelly **SANDS**
			SP	Poorly graded **SANDS**, gravelly **SANDS**
		SANDS With Over 12% Fines	SM	Silty **SANDS**, poorly graded **SAND-SILT** mixtures
			SC	Clayey **SANDS**, poorly graded **SAND-CLAY** mixtures
FINE GRAINED SOILS Over 50% < #200 sieve	**SILTS & CLAYS** Liquid Limit < 50		ML	Inorganic **SILTS**, silty or clayey fine **SANDS**, or clayey **SILTS** with plasticity
			CL	Inorganic **CLAYS** of low to medium plasticity, gravelly, sandy, or silty **CLAYS**, lean **CLAYS**
			OL	Organic **CLAYS** and organic silty **CLAYS** of low plasticity
	SILTS & CLAYS Liquid Limit > 50		MH	Inorganic **SILTS**, micaceous or diamacious fine sandy or silty soils, elastic **SILTS**
			CH	Inorganic **CLAYS** of high plasticity, fat **CLAYS**
			OH	Organic **CLAYS** of medium to high plasticity, organic **SILTS**
HIGHLY ORGANIC CLAYS			PT	PEAT & other highly organic soils

PLASTICITY CHART

USED FOR CLASSIFICATION OF FINE GRAINED SOILS



SAMPLE DRIVING RECORD

BLOWS PER FOOT	DESCRIPTION
25	25 Blows drove sampler 12 inches, after initial 6 inches of seating
50/7"	50 Blows drove sampler 7 inches, after initial 6 inches of seating
50/3"	50 Blows drove sampler 3 inches during or after initial 6 inches of seating

Note: To avoid damage to sampling tools, driving is limited to 50 blows per 6 inches during or after seating interval.

SOIL GRAIN SIZE

U.S. STANDARD SIEVE	6"	3"	¾"	4	10	40	200	
	BOULDER	COBBLE	GRAVEL		SAND			SILT / CLAY
			COARSE	FINE	COARSE	MEDIUM	FINE	
SOIL GRAIN SIZE IN MILLIMETERS	150	75	19	4.75	2.0	.425	0.075	0.002

KEY TO PIT & BORING SYMBOLS

- Standard Penetration test
- 2.5" O.D. Modified California Sampler
- 3" O.D. Modified California Sampler
- Shelby Tube Sampler
- 2.5" Hand Driven Liner
- Bulk Sample
- Water Level At Time Of Drilling
- Water Level After Time Of Drilling
- P — Perched Water

KEY TO PIT & BORING SYMBOLS

- Joint
- Foliation
- Water Seepage
- NFWE — No Free Water Encountered
- FWE — Free Water Encountered
- REF — Sampling Refusal
- DD — Dry Density (pcf)
- MC — Moisture Content (%)
- LL — Liquid Limit
- PI — Plasticity Index
- PP — Pocket Penetrometer
- UCC — Unconfined Compression (ASTM D2166)
- TVS — Pocket Torvane Shear
- EI — Expansion Index (ASTM D4829)
- Su — Undrained Shear Strength

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Project No.: E22116.000

March 2022

SOIL CLASSIFICATION CHART AND LOG EXPLANATION
Callison Road (7615)
Penryn, California

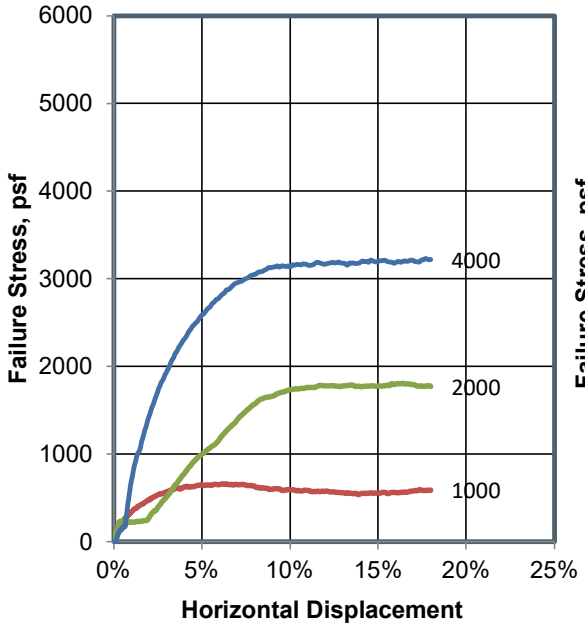
FIGURE
A-6

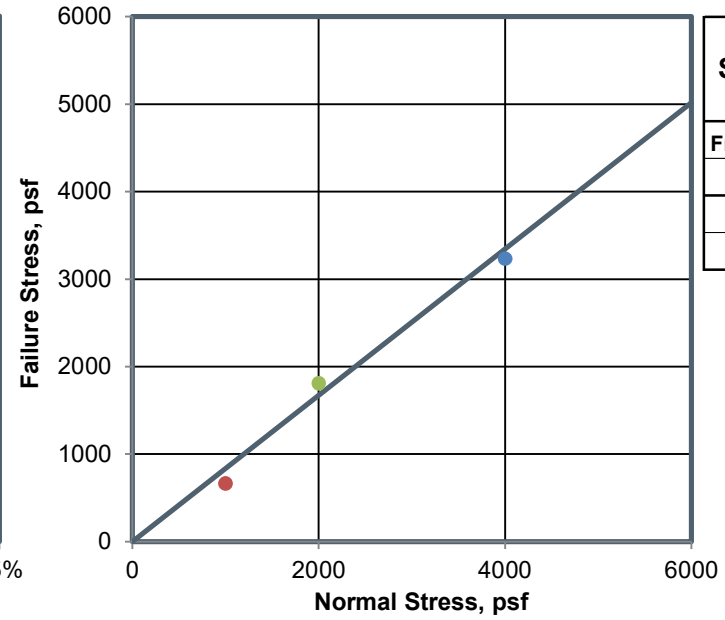
APPENDIX B

Laboratory Testing

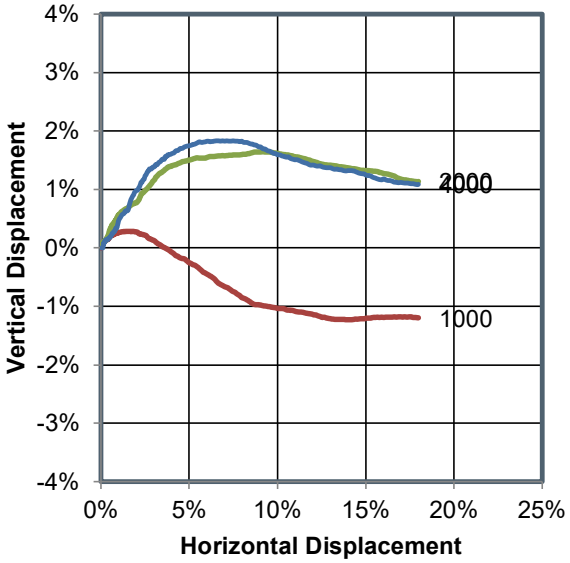
Direct Shear Test

Direct Shear Test of Soils Under Consolidated Drained Conditions, ASTM D3080





Direct Shearbox Results
Friction Angle
39.9°
Cohesion
0 psf



Test No.		1	2	3
Initial	Wet Density, pcf	118.4	118.4	118.4
	Dry Density, pcf	105.6	105.6	105.6
	Moisture Content, %	12.1	12.1	12.1
	Diameter, in	2.50	2.50	2.50
	Height, in	1.00	1.00	1.00
Pre Shear	Wet Density, pcf	128.9	137.7	139.4
	Dry Density, pcf	111.3	119.0	121.2
	Moisture Content, %*	15.8	15.8	15.0
	Diameter, in	2.50	2.50	2.50
	Height, in	0.95	0.89	0.87
Normal Stress, psf		1000	2000	4000
Failure Stress, psf		663	1809	3231
Failure Strain, %		6.17	16.38	17.70
Rate, in/min		0.002		

*Based on post shear moisture content

Sample Type: Specified Remold

Material Description: **Brown Clayey SAND with Gravel**

Source:

Notes: Gravel removed from test sample.

Sample No./Depth:	TP-1 @ 1.5-2'			USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	3/3/2022	Date Test Started:	3/17/2022				8	

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ESTABLISHED 1984
1234 Glenhaven Court, El Dorado Hills, CA 95762
ph 916.933.0633 ▪ fx 916.933.6482 ▪ www.youngdahl.net

Project: **Callison Road**

Project No.: **E22116.00**

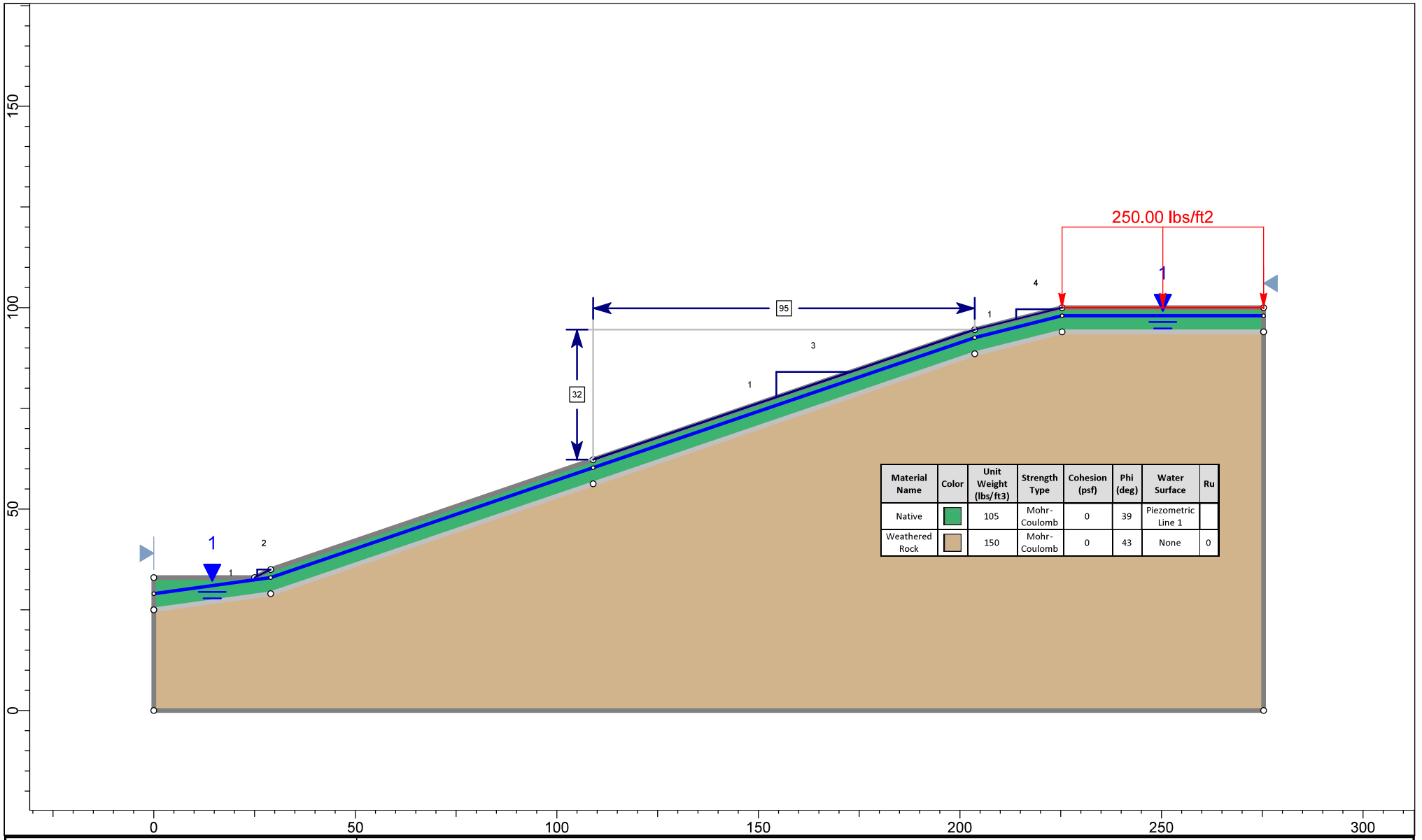
Figure B-1

Reviewed By: DN Date: 3/21/2022

APPENDIX C

Slope Stability Analysis

Static Conditions
Static Analysis
Seismic Conditions
Seismic Analysis

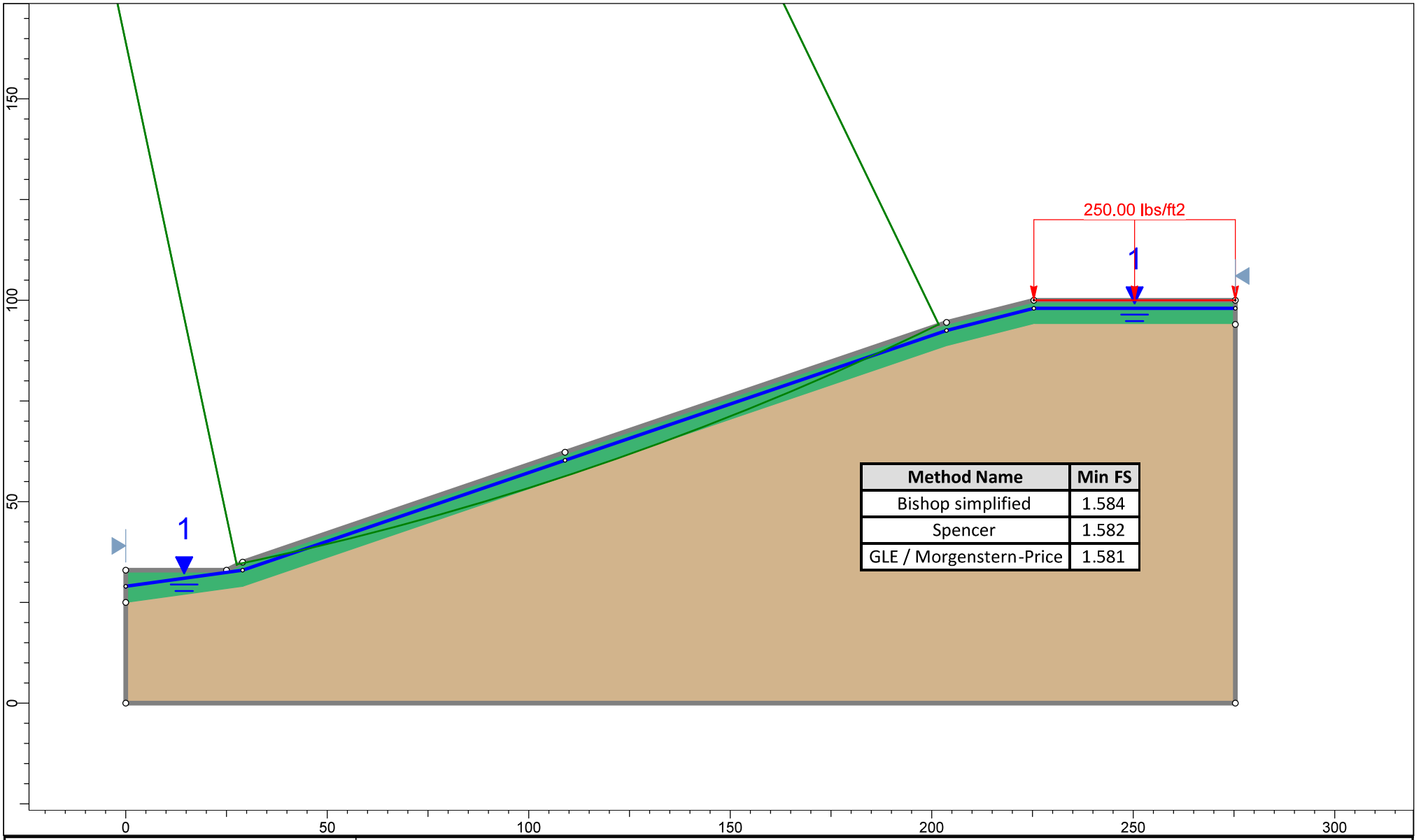


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Native		105	Mohr-Coulomb	0	39	Piezometric Line 1	
Weathered Rock		150	Mohr-Coulomb	0	43	None	0

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SLIDE 9.020

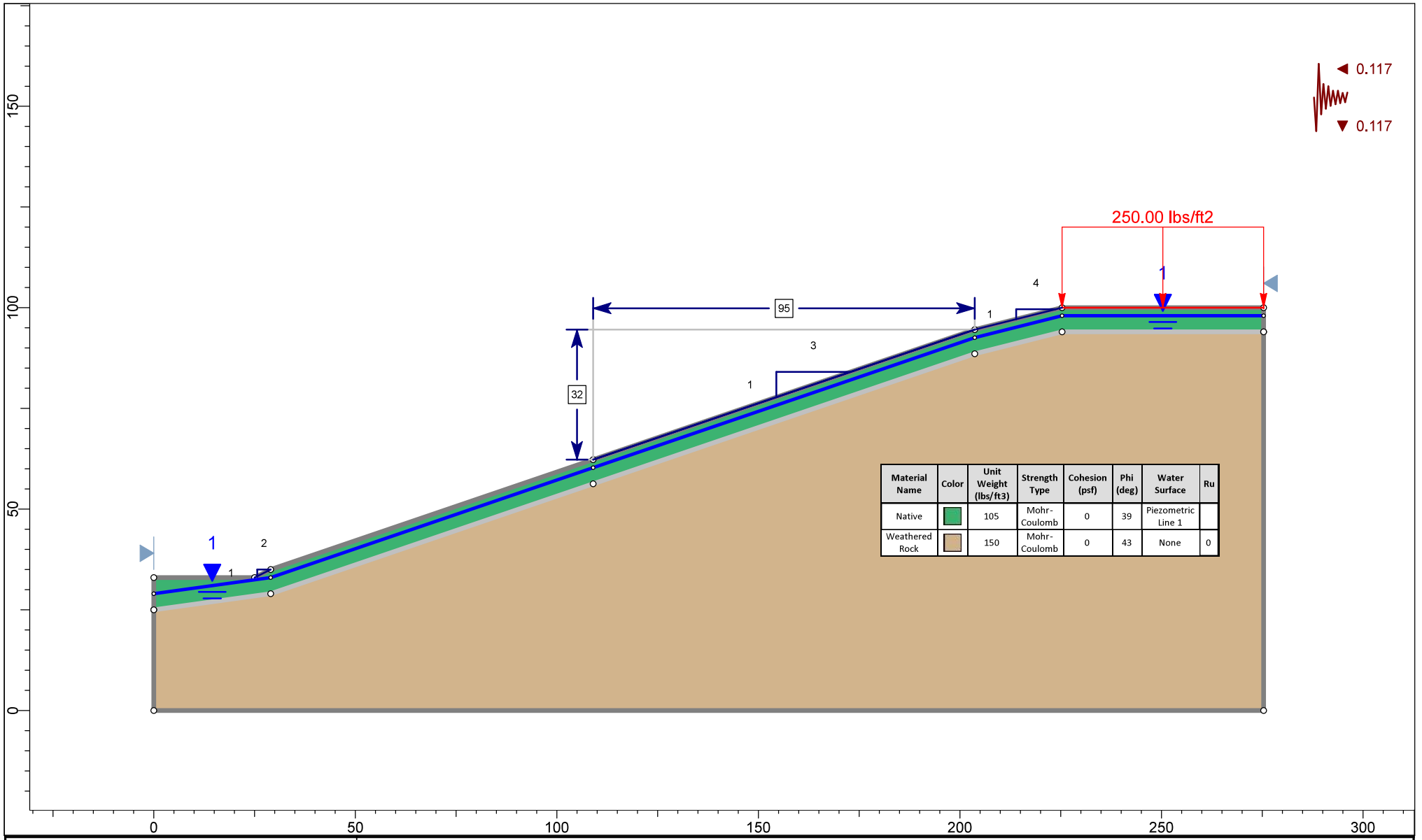
Project	E22116.000 Callison Road (7615) Slope Stability
Analysis Description	Leach Field Area
Scenario Group	Leach Field Area
Scenario	Static
Analysis Method	
Scale	1:400
File Name	E22116.000 Leach Field Slope Stability.slmd



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SLIDEINTERPRET 9.020

Project	E22116.000 Callison Road (7615) Slope Stability
Analysis Description	Leach Field Area
Scenario Group	Leach Field Area
Scenario	Static
Analysis Method	Bishop simplified
Scale	1:400
File Name	E22116.000 Leach Field Slope Stability.slmd

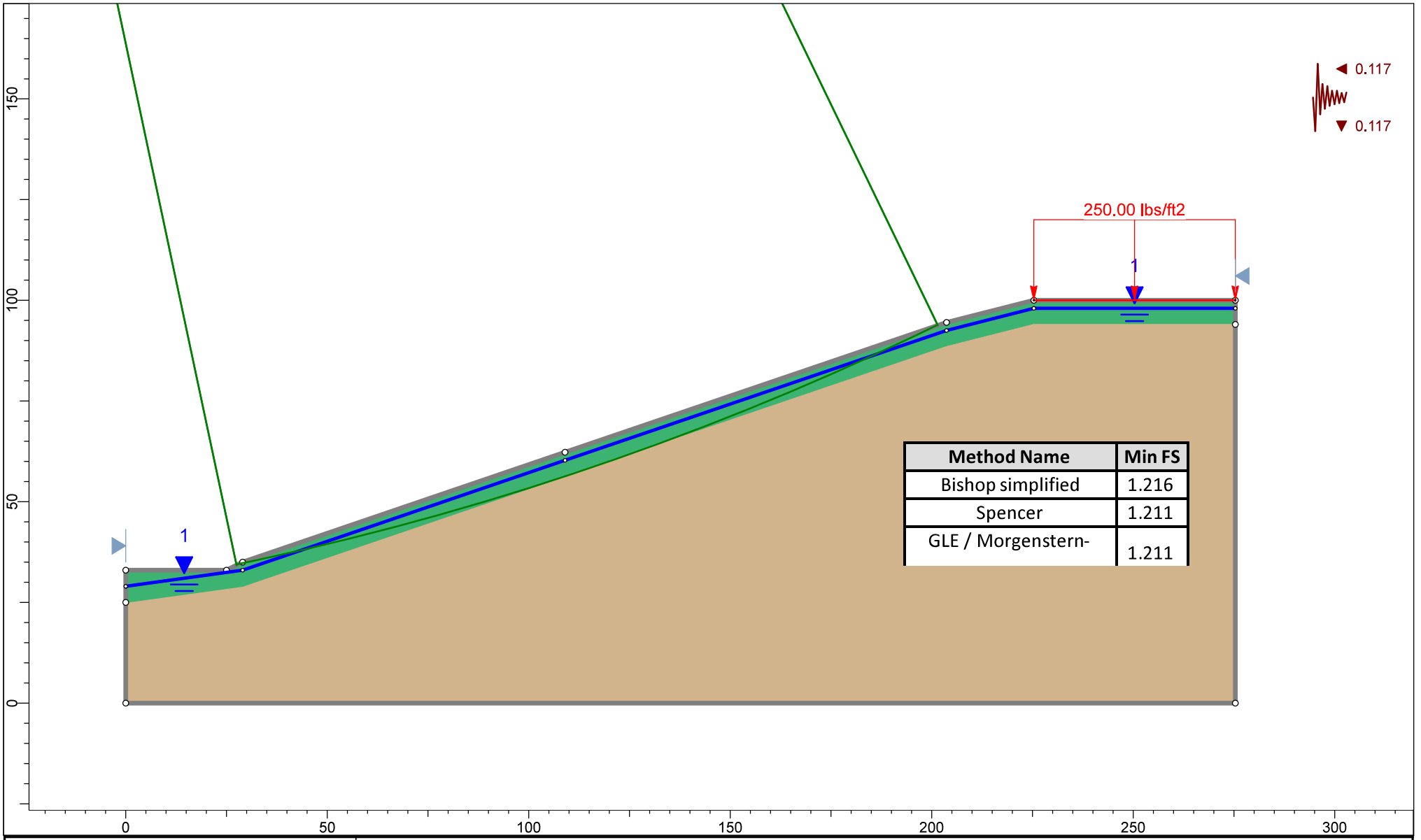


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Native		105	Mohr-Coulomb	0	39	Piezometric Line 1	
Weathered Rock		150	Mohr-Coulomb	0	43	None	0

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SLIDE 9.020

Project	E22116.000 Callison Road (7615) Slope Stability
Analysis Description	Leach Field Area
Scenario Group	Leach Field Area
Scenario	Seismic
Analysis Method	
Scale	1:400
File Name	E22116.000 Leach Field Slope Stability.slmd



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SLIDEINTERPRET 9.020

Project	E22116.000 Callison Road (7615) Slope Stability
Analysis Description	Leach Field Area
Scenario Group	Leach Field Area
Scenario	Seismic
Analysis Method	Spencer
Scale	1:400
File Name	E22116.000 Leach Field Slope Stability.slmd

APPENDIX K

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

December 2, 2021

Tim Tull
Building Engineering & Maintenance, Inc.
4780 Rocklin Road
Rocklin, CA 95677

Subject: Paleontological Resources Assessment for the 7615 Callison Road Winery Project, Penryn, Placer County, California (LSA Project No. BNM2101)

Dear Mr. Tull:

LSA conducted a paleontological resources assessment for the 7615 Callison Road Winery Project (project) in Penryn, Placer County, California. The purpose of the assessment was to determine whether paleontological resources may be present in the proposed project area, determine whether they might be impacted by development of the project, and make recommendations to mitigate potential impacts to paleontological resources, as appropriate.

PROJECT LOCATION AND DESCRIPTION

The project is bounded by the Union Pacific Railway to the north, residences to the east and west, and Callison Road to the south. The project location is depicted on the *Rocklin, California* 7.5-minute United States Geological Survey (USGS) topographic map in Township 12 North, Range 7 East, Sections 23, 26, and 27, Mount Diablo Baseline and Meridian (USGS, 1981 [Figure 1: Attachment B]).

The project seeks to construct a full-production winery, including grape vineyards, wine production facilities, tasting room, accessory restaurant, and associated facilities on 17.97 acres (Assessor Parcel Numbers [APN] 031-220-061, 032-124-080, and 032-124-044).

REGULATORY ENVIRONMENT

State of California

Under State law, paleontological resources are protected by the California Environmental Quality Act (CEQA) and Public Resources Code (PRC) Section 5097.5.

California Environmental Quality Act (Public Resources Code 21000 et seq.)

The purpose of CEQA is to provide a statewide policy of environmental protection. As part of this protection, State and local agencies are required to analyze, disclose, and, when feasible, mitigate the environmental impacts of, or find alternatives to, proposed projects. The *State CEQA Guidelines* (California Code of Regulations [CCR] 15000 et seq.) provide regulations for the implementation of CEQA and include more specific direction on documenting, analyzing, disclosing, and mitigating environmental impacts of a project. To assist in this process, Appendix G of the *State CEQA Guidelines* provides a sample checklist form that may be used to identify and explain the degree of impact a project will have on a variety of environmental aspects, including paleontological resources

(Section VII[f]). As stated in Section 15002(b)(1–3) of the *State CEQA Guidelines*, CEQA applies to governmental action, including activities that are undertaken by, are financed by, or require approval from a governmental agency.

California Public Resources Code, Section 5097.5

This law protects historic, archaeological, and paleontological resources on public lands in California and establishes criminal and civil penalties for violations. Specifically, PRC Section 5097.5 states that "No person shall knowingly or willfully excavate upon, remove, destroy, injure, or deface any … paleontological or historical feature, situated on public lands" and that public lands include lands "under the jurisdiction of the state, or any city, county, district, authority, or public corporation, or any agency thereof."

METHODS

LSA examined geologic maps of the project area and reviewed relevant geological and paleontological literature to determine which geologic units are in the project area and whether fossils have been recovered in the project area or from those or similar geologic units elsewhere in the region. Although a fossil locality search and field survey are also often conducted as part of the paleontological assessment, based on the results of the literature review, these additional research methods were not applicable for this project. A fossil locality search through the University of California Museum of Paleontology at Berkeley (UCMP) is unnecessary because it would not yield any results for the geologic units in the project area (see description below). Additionally, it was not necessary to conduct a pedestrian field survey to note the sediments at the surface and locate any paleontological resources that may be present at the surface because none would be present.

RESULTS

Literature Review

The project is located at the western margin of the Sierra Nevada Geomorphic Province, a 400-mile-long northwest-southeast-trending structural block that extends from the Cascade Ranges in the north to the Tehachapi Mountains in the south, enclosing the southern end of the Great Valley (California Geological Survey, 2002; Norris and Webb, 1976). This province is characterized by mountains that trend in a northwest-southeast direction forming the "backbone" of the state. Its east face is high and rugged, contrasting with the gentle western slope that disappears under sediments of the Great Valley which have been eroding from the Sierra Nevada Mountains almost continuously since the Jurassic (California Geological Survey, 2002; Howard, 1979; Norris and Webb, 1976). The bedrock of the Sierra Nevada Mountains is primarily composed of intrusive igneous rocks comprising the Sierra Nevada batholith, which consists of many separate bodies with ages ranging from 90 to 150 million years ago (Ma), but also includes Paleozoic to Mesozoic metamorphic rocks and Cenozoic volcanic rocks (Sharp, 1976). Geologic mapping by Gutierrez (2011) shows that the entire project area contains upper Jurassic (145.0–163.5 Ma; Cohen et al., 2021) Penryn Pluton, which is described in more detail below.

Penryn Pluton

The upper Jurassic Penryn Pluton consists of medium- to course-grained quartz diorite that formed as magma intruded the surrounding rock, cooled, and solidified below the surface (Gutierrez, 2011). Because the igneous rocks of the Penryn Pluton formed from magma below the surface, they will not contain fossils. Therefore, these rocks have no paleontological sensitivity.

RECOMMENDATIONS

The entire project area contains upper Jurassic Penryn Pluton, which does not have the potential to produce scientifically sensitive paleontological resources. Therefore, development of the project would not impact scientifically significant paleontological resources, and no mitigation is required for paleontological resources for this project.

Sincerely,

LSA Associates, Inc.



Jacob Biewer, M.Sc.
Paleontologist

Attachments: A – References
B – Figure 1: Project Location and Vicinity

ATTACHMENT A

REFERENCES

California Geological Survey
2002 California Geomorphic Provinces. California Geologic Survey Note 36. California Department of Conservation.

Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.X. Fan
2021 The ICS International Chronostratigraphic Chart. Updated July 2021. Episodes 36: 199-204

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2011 *Preliminary Geologic Map of the Sacramento 7.5' Quadrangle, California*, California Geological Survey Regional Geologic Map Series. Map Scale 1:24,000.

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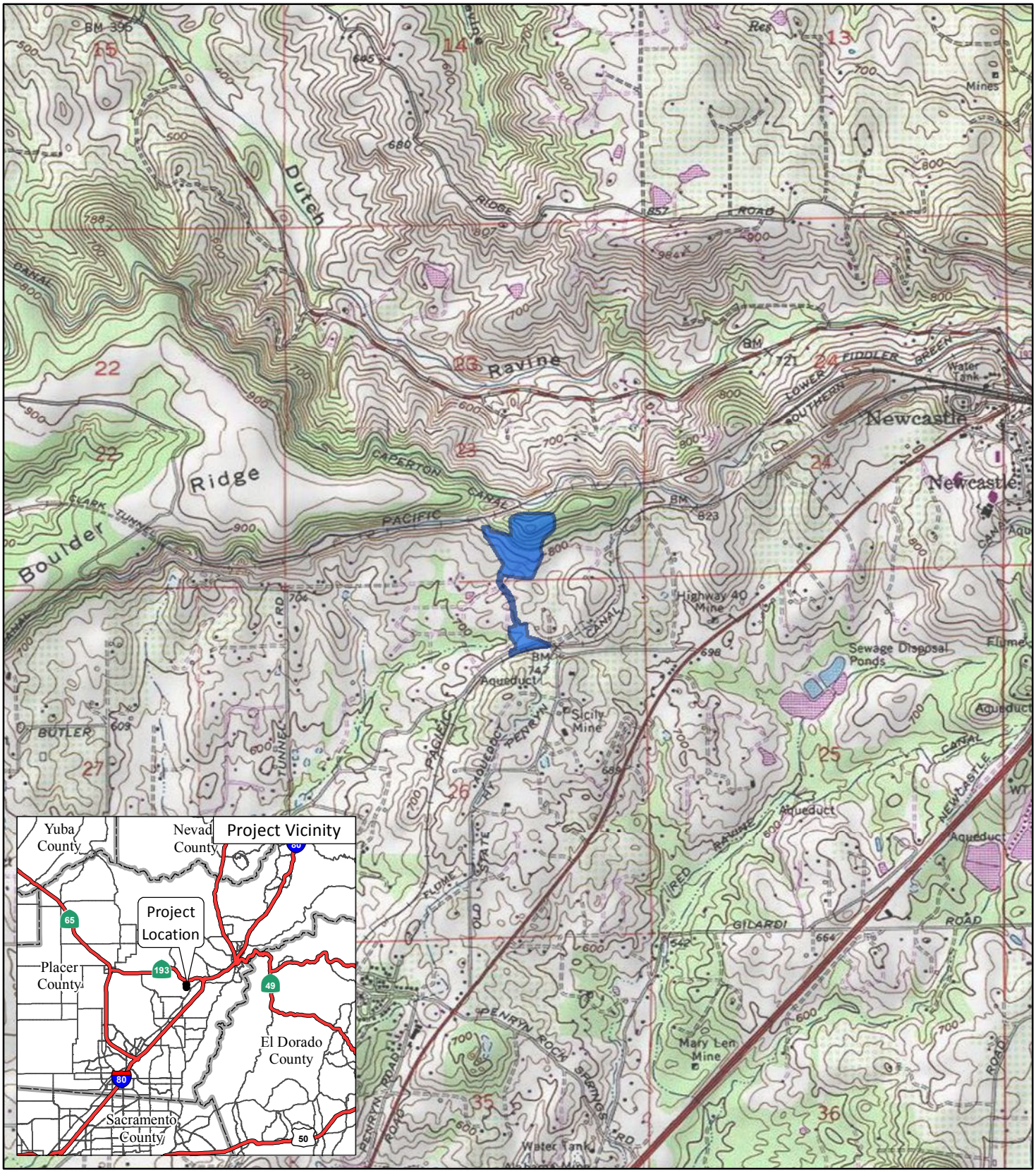
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1976 *Geology of California*. John Wiley and Sons, Inc., New York. 379 pp.

Sharp, R.P.
1976 Geology: Field Guide to Southern California. Kendall/Hunt Publishing Company, Second Edition: 181.

United States Geological Survey (USGS)
1981 Rocklin, California 7.5-minute topographic quadrangle. Published 1967, photorevised 1981. USGS, Denver.

ATTACHMENT B

FIGURE 1: PROJECT LOCATION AND VICINITY



LSA

LEGEND

Project Site - (17.97 ac)

FIGURE 1

N

0 1000 2000

FEET

7615 Callison Road Winery Project (BEM-08)
Penryn, Placer County, California
LSA Project No. BNM2001

Project Location and Vicinity

SOURCE: USGS 7.5-minute topographic quadrangle of Rocklin, CA (1967, ed. 1981)

I:\BNM2102\GIS\MXD\ProjLocation.mxd (11/30/2021)

APPENDIX L

PARTNER
Engineering and Science, Inc.®



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Project 8
7615 Callison Road
Penryn, California, 95663

Report Date: March 26, 2020
Partner Project No. 20-277052.1
Client Reference No. 277052



Prepared for:

Mima Capital LLC
4120 Douglas Boulevard, Suite 306-175
Granite Bay, California, 95746

March 26, 2020

Mike Fournier
Mima Capital, LLC
7851 Callison Road
Granite Bay, California, 95746

Subject: Phase I Environmental Site Assessment
Project 8
7615 Callison Road
Penryn, California, 95663
Partner Project No. 20-277052.1
Client Reference No. 277052

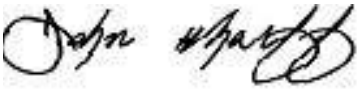
Dear Mr. Fournier:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (916) 237-0245

Sincerely,



John Wharff
Relationship Manager

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Mima Capital LLC for the property located at 7851 Callison Road in Penryn, Placer County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Mima Capital LLC with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located northeast of the corner of Sisley Road and Callison Road within a residential area of Placer County. Please refer to the table below for further description of the subject property:

Subject Property Data	
Address(es):	7851 Callison Road, Penryn, California
Additional Addresses	7665 Callison Road, 7615 Callison Road, 7535 Ridgeview Lane
Property Use:	Residential/Vacant Grassland
Land Acreage (Ac):	71.56 Ac
Number of Buildings:	Three single-family residences; three outbuildings
Number of Floors:	Five one-story; one two-story
Gross Building Area (SF):	1,304 SF (Parcel A); 1,308 SF (Parcel C_1); 1,472 SF (Building D)
Date of Construction:	1973 (Parcel A); 1949 (Parcel C_1); 1948 (Building D)
Assessor's Parcel Number (APN):	032-124-080 (Parcel A); 031-220-061 (Parcel B); 031-220-062 (Parcel C_1); 032-124-079 (Parcel C_2); 032-124-058 (Parcel D)
Type of Construction:	Wood-Framed
Current Tenants:	Mima Capital, LLC
Site Assessment Performed By:	Bailey Balshor of Partner
Site Assessment Conducted On:	March 17, 2020

The subject property currently consists of vacant grassland and three residences. The subject property is separated into four different sections. Parcel A is currently developed with one residence and a water well; Parcel B is utilized for grazing for a small herd of cattle and also houses a settling pond (currently being lined with clay) and water well; Parcel C_1 and C_2 are two distinct parcels that are grouped together and include a residence, a small herd of pygmy goats, and a water well; and Parcel D includes a residence that is currently planned to be demolished and a small herd of goats. The subject property is also improved with three outbuildings. Onsite activities primarily include residential activities and the upkeep of a limited number of farm animals. In addition to the current onsite improvements, the Antelope canal flows through the subject property. According to information provided by the client, the subject property is proposed for the development of a winery and vineyards, including a tasting room and various support structures.

According to available historical sources, the subject property was undeveloped land as early as 1891, and developed with orchards throughout the central and southern portions of the property as early as 1938. Between the early 1950s and mid-1960s, the orchards appeared to be diminishing, and were no longer present by 1975. The current residences were constructed in 1948, 1949, and 1973.

The immediately surrounding properties consist of single-family residences to the north, across railroad tracks; rural residences to the south, on either side of Callison Road and railroad tracks; rural residences to the east across railroad tracks; and rural residences to the west.

According to topographic map interpretation and data from onsite well drilling reports, the depth to groundwater in the vicinity of the subject property is inferred to be approximately 25 to 55 feet below ground surface (bgs) and groundwater flow is inferred to be toward the south-southeast.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any RECs during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any CRECs during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any HRECs during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- The subject property parcel was historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite. However, the former agricultural use of the subject property appears to have been limited, with widespread operations occurring prior to the large scale use of organochlorine pesticides. Additionally, review of conceptual drawings for the future

development indicate that the publicly accessible areas will largely be limited to the northern portion of the property, which does not appear to have been historically utilized for agricultural purposes. Furthermore, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely be present, if at all) will likely be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on these reasons, Partner concludes that the possible former use of agricultural chemicals is not expected to represent a significant environmental concern at this time.

- Due to the age of the subject property buildings, there is a potential that asbestos-containing material (ACM) and/or lead-based paint (LBP) are present. Readily visible suspect ACMs and painted surfaces were observed in good condition. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 7851 Callison Road in Penryn, Placer County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs in connection with the subject property; however, environmental issues were identified. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

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1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 7851 Callison Road in Penryn, Placer County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject

property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Mima Capital LLC engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Mima Capital LLC. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated

as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of a pre-survey questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner was unable to determine the property use at 5-year intervals, which constitutes a data gap. Except for property tax files and recorded land title records, which were not considered to be sufficiently useful, Partner reviewed all standard historical sources and conducted appropriate interviews.
- Partner was unable to access one of the three residences located onsite. Additionally, exterior areas were generally observed from the perimeter of the subject property. Based on the size and nature of use of the unobserved areas (residential and vacant grassland), this limited method of survey is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 7851 Callison Road in Penryn, California is located northeast of the intersection of Callison Road and Sisley Road. According to the Placer County Assessor, the subject property is legally identified as Assessor's Parcel Numbers (APNs) 031-220-061, 031-220-062, 032-124-058, 032-124-079, and 032-124-080.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property currently consists of vacant grassland and three residences. The subject property is separated into four different sections. Parcel A is currently developed with one residence and a water well; Parcel B is utilized for grazing for a small herd of cattle and also houses a settling pond (currently being lined with clay) and water well; Parcel C_1 and C_2 are two distinct parcels that are grouped together and include a residence, a small herd of pygmy goats, and a water well; and Parcel D includes a residence that is currently planned to be demolished and a small herd of goats. The subject property is also improved with three outbuildings. Onsite activities primarily include residential activities and the upkeep of a limited number of farm animals. In addition to the current onsite improvements, the Antelope canal flows through the subject property. According to information provided by the client, the subject property is proposed for the development of a winery and vineyards, including a tasting room and various support structures.

The subject property is designated for farm and residential-agricultural development by Placer County.

The subject property was not identified in the regulatory database report of Section 4.2

2.3 Current Use of Adjacent Properties

The subject property is located within a rural and residential area of Placer County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: Railroad tracks, beyond which is undeveloped land (no associated address) and single-family residential homes (103, 113 Spring Lane, 7850, 7880, 7890, and 7895 Armes Lane, 420 Skyview Drive)

South: Rural residences (7541 Ridgeview Lane and 7585, 7685 Callison Road) and Callison Road/railroad tracks beyond which are rural residences (1203, 1366 Sisley Road, 7880, 7945 Callison Road

East: Railroad tracks beyond which are rural residences (871, 1062 Peach Tree Lane) and undeveloped land (no associated address)

West: Rural residences (7429 Allen Lane, 7450, 7455 Ridgeview Lane)

No adjacent properties were identified in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Rocklin, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 800 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping moderately toward the west.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the south-southeast. The nearest surface water in the vicinity of the subject property is the Antelope Canal, which flows throughout the subject property. The canal and a settling pond were observed on the property and are further discussed in Section 6.0. No lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

The majority of the subject property receives domestic and irrigation water from three private wells located on the subject property. 7851 Callison Road receives domestic water directly from the Antelope Canal.

Information provided by well drilling records indicates the static water level of the wells on the subject property is approximately 25 to 55 feet below ground surface (bgs).

2.4.3 Geology/Soils

The subject property is located within the Northern Sierra Nevada Geomorphic Province, which is characterized by highly deformed north-south trending complex of metasedimentary rock and batholithic units. The metasedimentary and crystalline basement rocks are highly fractured and faulted and are overlain by Quaternary sediment derived from surrounding hills. The subsurface soil types in the general area are characterized by unconsolidated Quaternary age sediments. These sediments consist of clayey to sandy silts ranging from depths of 5 to 10 feet bgs, overlying more competent fractured bedrock. The bedrock contract is at a depth of approximately 5 to 20 feet bgs.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Andregg coarse sandy loam, Caperton-Andregg coarse sandy loam, and Caperton-Rock outcrop. The Andregg series consist of shallow, well drained soils that form from residuum weathered from granite. These soils are on hills and range in slope from 15 to 50 percent. The Capterton series consists of very shallow, somewhat excessively drained soils that formed from residuum weathered from granite. These soils are on hills and range in slope from 2 to 15 feet bgs.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06061C0960H, dated on November 2,

2018, the subject property appears to be in Zone X, an area located outside of the 100-year and 500-year flood plains.

A copy of the reviewed flood map is not included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information		
Period/Date	**Source**	**Description/Use**
1891-1893	Topographic Maps	Undeveloped/unimproved land
1938-1966	Aerial Photographs, Building Records, City Directories	Developed with orchards and improved with rural residences and outbuildings in 1948 and 1949
1973-Present	Aerial Photographs, Building Records, City Directories, Interviews, Onsite Improvements	Improved with remaining residence and left as vacant grassland

According to available historical sources, the subject property was undeveloped land as early as 1891 and developed with orchards throughout the central and southern portions of the property as early as 1938. Between the early 1950s and mid-1960s, the orchards appeared to be diminishing, and were no longer present by 1975. The current residences were constructed in 1948, 1949, and 1973.

The subject property parcel was historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite. However, the former agricultural use of the subject property appears to have been limited, with widespread operations occurring prior to the large scale use of organochlorine pesticides. Additionally, review of conceptual drawings for the future development indicate that the publicly accessible areas will largely be limited to the northern portion of the property, which does not appear to have been historically utilized for agricultural purposes. Furthermore, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely be present, if at all) will likely be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on these reasons, Partner concludes that the possible former use of agricultural chemicals is not expected to represent a significant environmental concern at this time.

No other potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources, Inc. (EDR) on March 6, 2020. The following was observed on the subject property and adjacent properties during the aerial photograph review:

Date: 1938	***Scale: 1"=500'***
Subject Property:	Appears to be developed with orchards over the majority of the property
North:	Appears to be developed with orchards across railroad tracks
South:	Appears to be developed with orchards and a rural residences on either side of the railroad tracks and Callison Road

Date: 1938	***Scale: 1"=500'***
East:	Appears to be developed with orchards and a rural residence across railroad tracks
West:	Appears to be developed with orchards

Date: 1952	***Scale: 1"=500'***
Subject Property:	Appears to be developed with the current residences and out buildings located on Parcels C_1 and D; no other significant changes visible
North:	Appears to be primarily vacant land, with only the property to the northeast still remaining as orchards
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Date: 1966	***Scale: 1"=500'***
Subject Property:	Appears to be primarily vacant land on the northern portion of the property, with small areas still developed with orchards; no other significant changes visible
North:	No significant changes visible
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Date: 1975	***Scale: 1"=500'***
Subject Property:	Prior orchards appear to be completely gone and replaced as vacant grassland; Parcel A appears to be developed with the current rural residence and a settling pond
North:	Appears to be vacant land
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Date: 1984	***Scale: 1"=500'***
Subject Property:	Parcel A appears to have been developed with an additional settling pond and Parcel C_1 appears to be developed with a small ponding area; no other significant changes visible
North:	No significant changes visible
South:	No significant changes visible
East:	Appears to be primarily vacant land developed with additional rural residences
West:	No significant changes visible

Date: 1993	***Scale: 1"=500'***
Subject Property:	No significant changes visible
North:	No significant changes visible
South:	Prior orchards are no longer visible; appears to be further developed with additional rural residences
East:	Developed with what appears to be residential homes
West:	No significant changes visible

Date:	*2006, 2009, 2012, 2016*	*Scale:*	*1"=500'*
Subject Property:	No significant changes visible		
North:	Appears to be developed with the current single-family residences across the railroad tracks		
South:	No significant changes visible		
East:	No significant changes visible		
West:	No significant changes visible		

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of Sanborn Fire Insurance Maps from EDR on March 9, 2020. Sanborn map coverage was not available for the subject property.

A copy of the EDR No Coverage letter is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR on March 9, 2020 for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search for 7851, 7665, 7615 Callison Road (Subject Property)

Year(s)	Occupant Listed
1974	No listings
1980	Rollin R. Harlow (7851 Callison Road)
1985	Rollin R. Harlow (7851 Callison Road)
1989	XXXX (7851 Callison Road)
1992	No listings
1995	Michael O. Bates (7851 Callison Road)
2000	No listings
2005	No listings
2010	Rebecca L. Hoffman (7851 Callison Road)
2014	Occupant Unknown (7851 Callison Road)

* XXXX= A phone number is present but is not registered to a tenant or is disconnected.

Please note that the subject property address on Ridgeview Lane was not covered in the researched city directories. Based on the residential use of the structure, the lack of city directory coverage is not expected to represent a significant data gap.

Based on the city directory review, no environmentally sensitive listings were identified for the subject property address.

City Directory Search for Adjacent Properties

Year(s)	Occupant Listed
1974	Richard Bowler, Frank C. Houghton (7585 Callison Road)
1980	Richard Bowler (7585 Callison Road)
1985	XXXX (7585 Callison Road)
1989	Barry Elkin, Charlotte Elkin (7585 Callison Road)

City Directory Search for Adjacent Properties	
Year(s)	**Occupant Listed**
1992	Larry Susbilla (7880 Callison Road); Barry Elkin (7585 Road)
1995	Larry Susbilla (7880 Callison Road); Barry Elkin (7585 Road)
2000	Joseph A. Kelly (7945 Callison Road); Cord Lamphere (7880 Callison Road)
2005	Cord D. Lamphere, Penryn Engineering (7880 Callison Road); Bear Ranch, Tim Millwee (7585 Callison Road)
2010	Steve T. Cannon, Bear Ranch (7585 Callison Road); Cord D. Lampherer, Penryn Engineering (7880 Callison Road); Joseph A. Kelly (7945 Callison Road)

Based on the city directory review, no environmentally sensitive listings were identified for the adjacent property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on March 6, 2020. The following was observed on the subject property and adjacent properties during the topographic map review:

Date: 1891, 1892, 1893	
Subject Property:	Depicted as undeveloped/unimproved land
North:	Depicted as undeveloped/unimproved land
South:	Depicted as undeveloped/unimproved land on either side of a road and railroad tracks
East:	Depicted as undeveloped/unimproved land across a railroad
West:	Depicted as undeveloped/unimproved land

Date: 1944, 1947	
Subject Property:	Depicted as developed with small structures in the vicinity of Parcel C_1 and Parcel D
North:	No significant changes depicted
South:	Depicted as developed with small structures on either side of the road and railroads
East:	Depicted as developed with a small structure across railroad tracks
West:	No significant changes depicted

Date: 1954, 1967	
Subject Property:	Shaded to depict the southern portion of the property as developed with orchards and the northern portion developed with woodland
North:	Shaded to depict the vicinity as developed with woodland to the northwest and orchards to the northeast, across a railroad
South:	Depicted as developed with orchards on either side of the road and railroad tracks
East:	Depicted as developed with orchards across a railroad tracks
West:	Shaded to depict the vicinity as developed with orchards

Date: 1981	
Subject Property:	Prior orchards are no longer depicted; depicted as developed with various small structures
North:	No significant changes depicted
South:	No significant changes depicted
East:	No significant changes depicted
West:	Depicted as developed with several small structures

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 Health Department

Regulatory Agency Data	
Name of Agency:	Placer County Environmental Health Department (PCEHD)
Point of Contact:	Public Records Request: https://placercounty.nextrequest.com/ Online Records: https://ecmwebprod.placer.ca.gov/ehs2/!samples/sample-cq/index.html
Agency Address:	3091 County Center Drive, Suite 180 Auburn, California
Agency Phone Number:	(530) 745-2300
Date of Contact:	March 9, 2020
Method of Communication:	Online Request, Online Search
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the PCEHD. Available records include water well drilling reports. According to the reports, the well located at 7615 Callison Drive was finalized on June 12, 2017 and has a static water level of 40 feet below ground surface (bgs) and a total depth of 120 feet bgs. The well located at 7535 Ridgeview Lane was finalized on September 6, 2019 and has a static water level of 25 feet bgs and a total depth of 120 feet bgs. The well located at 7665 Callison Road was finalized on November 12, 2013 and has a static water level of 55 ft bgs and a total depth of 325 ft bgs.

4.1.2 Air Pollution Control Agency

Regulatory Agency Data	
Name of Agency:	Placer County Air Quality Management District (PCAPCD)
Point of Contact:	https://placercounty.nextrequest.com/
Agency Address:	110 Maple Street, Auburn, California
Agency Phone Number:	(530) 745-2330
Date of Contact:	March 9, 2020
Method of Communication:	Online Request
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the AQMD

4.1.3 Regional Water Quality Agency

Regulatory Agency Data	
Name of Agency:	Regional Water Quality Control Board (RWQCB)
Point of Contact:	http://geotracker.waterboards.ca.gov/
Agency Address:	11020 Sun Center Drive, Rancho Cordova, California
Agency Phone Number:	(916) 464-3291
Date of Contact:	March 9, 2020

Regulatory Agency Data	
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

4.1.4 Department of Toxic Substances Control

Regulatory Agency Data	
Name of Agency:	California Department of Toxic Substances Control (DTSC)
Point of Contact:	https://www.envirostor.dtsc.ca.gov/public/ https://hwts.dtsc.ca.gov/
Agency Address:	8800 Cal Center Drive, Sacramento, California
Agency Phone Number:	9916) 255-3545
Date of Contact:	March 9, 2020
Method of Communication:	Online Research
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the DTSC.

4.1.5 Building Department

Regulatory Agency Data	
Name of Agency:	Placer County Community Development Department (PCCD)
Point of Contact:	https://placercounty.nextrequest.com/
Agency Address:	3091 Country Center Drive, Auburn, California
Agency Phone Number:	(530) 745-3000
Date of Contact:	March 9, 2020
Method of Communication:	Online FOIA Request
Summary of Communication:	As of the date of this report, Partner has not received a response from the PCCD for inclusion in this report.

Building Records Reviewed for the subject property (Subject Property)		
Year(s)	**Owner/Applicant**	**Description**
1965	Eugene Page	Kitchen addition and porch (7615 Callison Road)
1973	Frank Houghton	Plumbing Permit (7535 Ridgeview Lane)
1974	Richard Bowler	Mobile home permit to be removed when the house is completed (7535 Ridgeview Lane)
1975	Frank Houghton	Pool permit (7535 Ridgeview Lane)
2003	Frances Wong	Reroof (7851 Callison Road)
2017	Shawn and Jane Skaife	Residential re-roof – addressed as 8085 Callison Road (7665 Callison Road)
2017	Shawn and Jane Skaife	Replace all windows, remodel kitchen, laundry room, closet, minor framing, bathroom, shower – addressed as 8085 Callison Road (7665 Callison Road)
2019	Mima Capital LLC	100 AMP Power to water well onsite (7615 Callison Road)

4.1.6 Planning Department

Regulatory Agency Data	
Name of Agency:	Placer County Planning Services Division (PCPSD)
Point of Contact:	http://gis-placercounty.opendata.arcgis.com/
Agency Address:	3091 Country Center Drive
Agency Phone Number:	(530) 745-3000
Date of Contact:	March 9, 2020
Method of Communication:	Online Research
Summary of Communication:	According to records reviewed, the subject property is zoned RA-B-100 for Residential Agricultural development and F-B-X for farm development by Placer County.

4.1.7 Oil & Gas Exploration

Regulatory Agency Data	
Name of Agency:	California Division of Geologic Energy Management Division (CalGEM, formerly DOGGR)
Point of Contact:	https://maps.conservation.ca.gov/doggr/wellfinder
Agency Address:	801 K Street, Sacramento, California
Agency Phone Number:	(916) 445-9686
Date of Contact:	March 9, 2020
Method of Communication:	Online Research
Summary of Communication:	According to CalGEM, no oil or gas wells are located on or adjacent to the subject property.

4.1.8 Assessor's Office

Regulatory Agency Data	
Name of Agency:	Placer County Assessor (PCA)
Point of Contact:	https://www.placer.ca.gov/1979/Assessment-Inquiry
Agency Address:	2980 Richardson Drive, Auburn, California
Agency Phone Number:	(530) 889-4300
Date of Contact:	March 9, 2020
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is identified by Assessor Parcel Numbers (APNs) 032-124-058, 031-220-062, 032-220-061, 032-124-079 and 032-124-080. The current buildings were constructed in 1948, 1949, and 1973.

4.1.9 Agricultural Department

Regulatory Agency Data	
Name of Agency:	Placer County Agriculture Department (PCAD)
Point of Contact:	Darryl Mitani, Supervising Agricultural Inspector
Agency Address:	11477 East Avenue, Auburn, California
Agency Phone Number:	(530) 889-7372
Date of Contact:	March 9, 2020
Method of Communication:	Email

Regulatory Agency Data

Summary of Communication: According to Mr. Mitani, Placer County only retains records regarding pesticides and agricultural chemicals for three years. No records of agricultural chemicals were available for review for the subject property.

Copies of pertinent documents obtained from the aforementioned regulatory agencies is provided in Appendix B of this report.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N

4.2.2 Subject Property Listings

The subject property is not identified in the regulatory database report.

4.2.3 Adjacent Property Listings

The adjacent properties are not identified in the regulatory database report.

It should be noted that EDR mapped a listing identified as Max Beddes at 7520 Callison Road as being located to the southwest of the subject property. Utilizing property deed information available online, it appears 7520 Callison Road is currently identified as 7345 Ridgeview Drive, a non-adjacent address. As such, this listing is not expected to represent a significant environmental concern.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report. Listed sites within the specified search radius of the subject property which appeared on local, State, or Federally published lists of sites that have had releases of hazardous substances have received regulatory closure and/or were determined to be of sufficient distance and/or situated hydrologically cross- or down-gradient such that impact of the subject property is unlikely. Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.5 Orphan Listings

No orphan listings of concern are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Mima Capital LLC (User of this report).

User Responsibilities

Item	Provided By User	Not Provided By User	Discussed Below	Does Not Apply
Environmental Pre-Survey Questionnaire			**X**	
Title Records, Environmental Liens, and AULs			**X**	
Specialized Knowledge			**X**	
Actual Knowledge			**X**	
Valuation Reduction for Environmental Issues			**X**	
Identification of Key Site Manager	**Section 5.1.3**			
Reason for Performing Phase I ESA	**Section 1.1**			
Prior Environmental Reports		**X**		
Other		**X**		

5.1 Interviews

5.1.1 Interview with Owner

Mr. Mike Fournier, subject property owner/representative, was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to Mr. Fournier, the subject property has remained in its current state of development since approximately the 1960s. Through the years, the subject property has been utilized as grazing land for a small number of farm animals and is still developed with the original residences dating back to possibly as early as the 1950s. Prior to this, the subject property was formerly developed with orchards. Mr. Fournier further stated that there are no USTs, ASTs, clarifiers, oil/water separators, groundwater monitoring wells, or hazardous substance use/storage/generation on the subject property to the best of his knowledge. He did indicate that the subject property is improved with three water wells. Additionally, he indicated that the property is set to be converted into a vineyard and winery. During redevelopment activities, the residence located on Parcel D is likely to be demolished.

5.1.2 Interview with Report User

Mr. Mike Fournier is also identified as the report user.

5.1.3 Interview with Key Site Manager

Mr. Mike Fournier is also identified as the key site manager.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was provided a Preliminary Report. According to the report, 7851 Callison Road (Parcel D of the subject property) is currently under the ownership of Dale Ann Friedlander, Trustee of Madeline Wong Revocable Trust. No other pertinent information was provided.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was overcast. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data	
Site Assessment Performed By:	Bailey Balshor
Site Assessment Conducted On:	March 17, 2020

The table below provides the subject property personnel interviewed during the field reconnaissance:

Site Visit Personnel for 7851 Callison Road (Subject Property)			
Name	**Title/Role**	**Contact Number**	**Site Walk* Yes/No**
Mike Fournier	Key Site Manager	(916) 813-9920	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste generated at the subject property is disposed of in residential trash cans located near the residential structures on the subject property. An independent solid waste disposal contractor, Recology, and onsite residents remove solid waste from the subject property. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges from the subject property are directed to three on-site septic systems, as further discussed in Section 6.1.7.

6.1.3 Surface Water Drainage

Storm water is removed from the subject property primarily by percolation into the ground surface and towards the onsite settling pond.

The subject property does appear to be a designated wetland area, based on information obtained from the United States Fish & Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. The subject property is mapped as having a freshwater pond located where the settling pond is and riverine habitat. No other surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

Heating and cooling systems as well as domestic hot water equipment are fueled by electrically powered heating and air systems. Hot water is provided by electric hot water heaters.

6.1.5 Wells and Cisterns

Parcel A, Parcel B, and Parcel C_1 are all equipped with water wells that serve domestic and irrigation purposes. The wells are further discussed in Section 4.1.1. Additionally, Mr. Fournier indicated that Parcel C_1 was formerly equipped with an additional, shallow well that has since been abandoned in accordance with applicable regulations; however, Partner was not provided any records regarding this abandoned well.

No aboveground evidence of cisterns, dry wells, injection wells, or monitoring wells was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater generated at the subject property is disposed by means of two septic systems. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

Three septic systems are currently in place on the subject property. The septic systems are located adjacent to the residential structures and receive wastewater from restroom and kitchen areas within these buildings. No system failures or other concerns were reported by the property owner. Based on the use of the septic systems solely for domestic waste, these features are not expected to represent a significant environmental concern at this time. It should be noted that the location of the septic tank on Parcel D could not be located during site reconnaissance.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No hazardous substances or petroleum products were observed on the subject property during the site reconnaissance.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

Partner observed what appeared to be a former propane tank on Parcel D. Based on the content and aboveground nature of the tank, this apparent former propane tank is not expected to represent a significant environmental concern.

No evidence of current or former USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

Older transformers and other electrical equipment could contain PCBs at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Under the regulations, there are three categories into which electrical equipment can be classified: 1) Less than 50 parts per million (ppm) of PCBs – "*Non-PCB;*" 2) 50 ppm-500 ppm – "*PCB-Contaminated;*" and, 3) Greater than 500 ppm – "*PCB-Containing.*" The manufacture, process, or distribution in commerce or use of any PCB in any manner other than in a totally enclosed manner was prohibited after July 2, 1979.

The on-site reconnaissance addressed indoor and outdoor transformers that may contain PCBs. Three pole-mounted transformers were observed on the subject property. The transformers are not labeled indicating PCB content. No staining or leakage was observed in the vicinity of the transformers. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

Additionally, no other potential PCB-containing equipment (interior transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, balers, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

The subject property is currently equipped with a settling pond located on the southwest portion of Parcel B. According to Mr. Fournier, the ponds currently receives stormwater runoff from the subject property.

A pit is located east of the residence located on Parcel C_1. The pit is presumed to be associated with a former pool or possibly a former stormwater collection area.

No other pits, ponds, or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

The subject property buildings were constructed between 1949 and 1973 and may have asbestos containing materials (ACMs: materials containing >1% asbestiform components determined by the EPA 600/R-93/116 Method using Polarized Light Microscopy) present. The table below outlines suspect ACM that is generally found in buildings of this age:

Suspect ACM
Drywall Systems
Floor Tiles
Floor Tile Mastic

Based on the date of construction, prior to disturbance, Partner recommends a comprehensive asbestos survey of the property to determine the presence, condition, friability and likely future condition of suspect or confirmed ACM. All suspect materials must be handled as ACM according to local, state and federal regulations until the results of sampling and analysis indicate the material is a non-ACM. According to the US EPA, ACM that is intact and in good condition can, in general, be managed safely in-place under an Operations and Maintenance (O&M) Program until removal is dictated by renovation, demolition, or deteriorating material condition.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm^2 (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Based on the age of the subject property buildings (pre-1978), there is a potential that LBP is present. Interior and exterior painted surfaces were observed in good condition and therefore not expected to represent a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	**Average Predicted Radon Levels**	**Potential**
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

According to Mr. Fournier, two of three current residences onsite receive their water for private wells. The remaining residence receives domestic water from the Antelope Canal, which is then sent through a filtration system. Mr. Fournier was unaware if the wells or canal water have been tested for water quality.

6.3.5 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g.in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Partner observed accessible, interior areas for the subject property buildings for significant evidence of mold growth with the exceptions detailed in Section 1.5 of this report; however, this ESA should not be used as a mold survey or inspection. Additionally, this limited assessment was not designed to assess all areas of potential mold growth that may be affected by mold growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

No obvious indications of water damage or mold growth were observed during Partner's visual assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

7.0 FINDINGS AND CONCLUSIONS

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any RECs during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any CRECs during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any HRECs during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- The subject property parcel was historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite. However, the former agricultural use of the subject property appears to have been limited, with widespread operations occurring prior to the large scale use of organochlorine pesticides. Additionally, review of conceptual drawings for the future development indicate that the publicly accessible areas will largely be limited to the northern portion of the property, which does not appear to have been historically utilized for agricultural purposes. Furthermore, during site development activities, near surface soils (where residual agricultural chemical concentrations would most likely be present, if at all) will likely be mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on these reasons, Partner concludes that the possible former use of agricultural chemicals is not expected to represent a significant environmental concern at this time.

- Due to the age of the subject property buildings, there is a potential that ACM and/or LBP are present. Readily visible suspect ACMs and painted surfaces were observed in good condition. Should these materials be replaced, the identified suspect ACMs would need to be sampled to confirm the presence or absence of asbestos prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 7851 Callison Road in Penryn, Placer County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of RECs in connection with the subject property; however, environmental issues were identified. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 7851 Callison Road in Penryn, Placer County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:



Bailey Balshor
Environmental Scientist

Reviewed By:



Corinne Kennah-Cohn, Environmental Professional
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, March 2020

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, March 2020

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, March 2020

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, March 2020

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, March 2020

United States Geological Survey, accessed via the internet, March 2020

United States Geological Survey Topographic Map 2010, 7.5 minute series, accessed via internet, March 2020

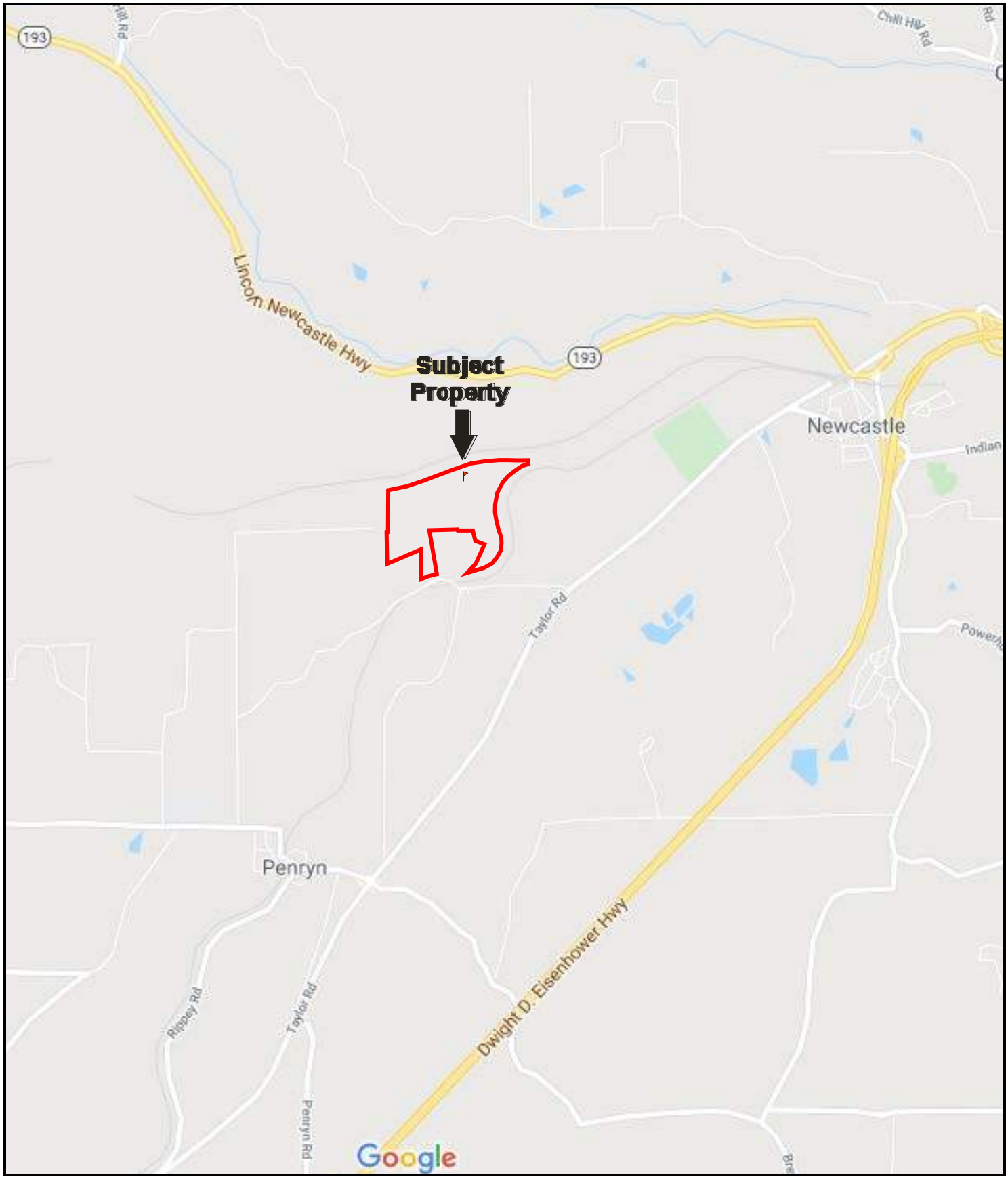
FIGURES

1 SITE LOCATION MAP

2 SITE PLAN

3 TOPOGRAPHIC MAP

PARTNER



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Drawing Not To Scale

KEY:
Subject Property

FIGURE 1: SITE LOCATION MAP
Project No. 20-277052.1

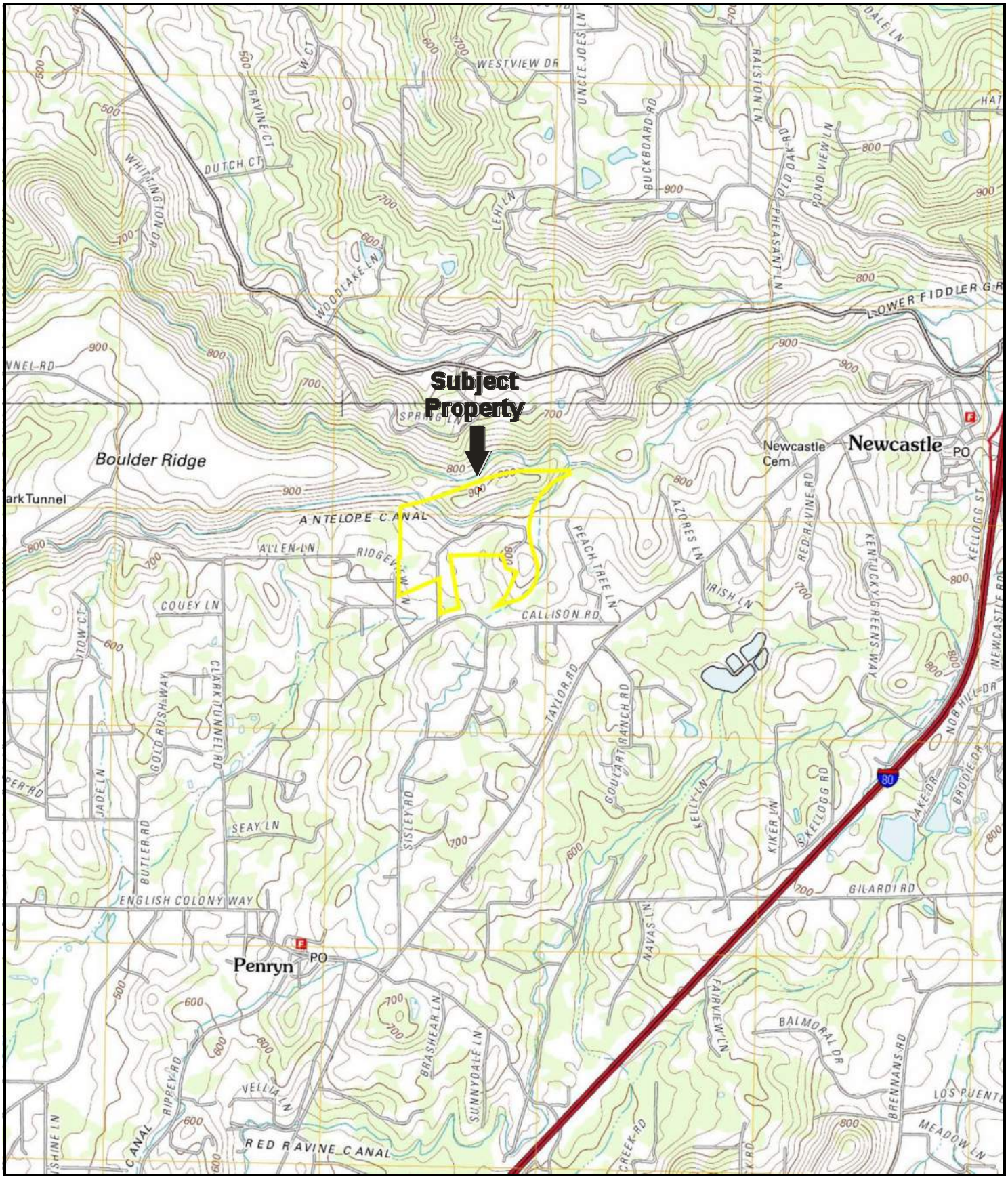
PARTNER



FIGURE 2: SITE PLAN

Project No. 20-277052.1

PARTNER



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USGS 7.5 Minute *Rocklin, California* Quadrangle
Created: 2012

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 20-277052.1

PARTNER

APPENDIX A: SITE PHOTOGRAPHS



1. Residence on Parcel A



2. Interior of residence



3. Septic tank on Parcel A



4. Water well on Parcel A



5. Overview of Parcel B



6. Settling pond on Parcel B



7. Water well on Parcel B



8. View from up on the hill top of Parcel B



9. Parcel B/C_1 boundary area



10. Parcel B/C_1 boundary area



11. Residence on Parcel C_1



12. Barn and pygmy goat enclosure of Parcel C_1



13. Barn on Parcel C_1



14. Residence on Parcel C_1



15. Interion of the residence



16. Empty lot/likely former swimming pool



17. View of Parcel C_2



18. Barn structure located on Parcel D



19. Residence on Parcel D



20. Another view of the residence on Parcel D



21. Northern adjacent properties over the crest of the hill



22. Eastern adjacent property in the distance

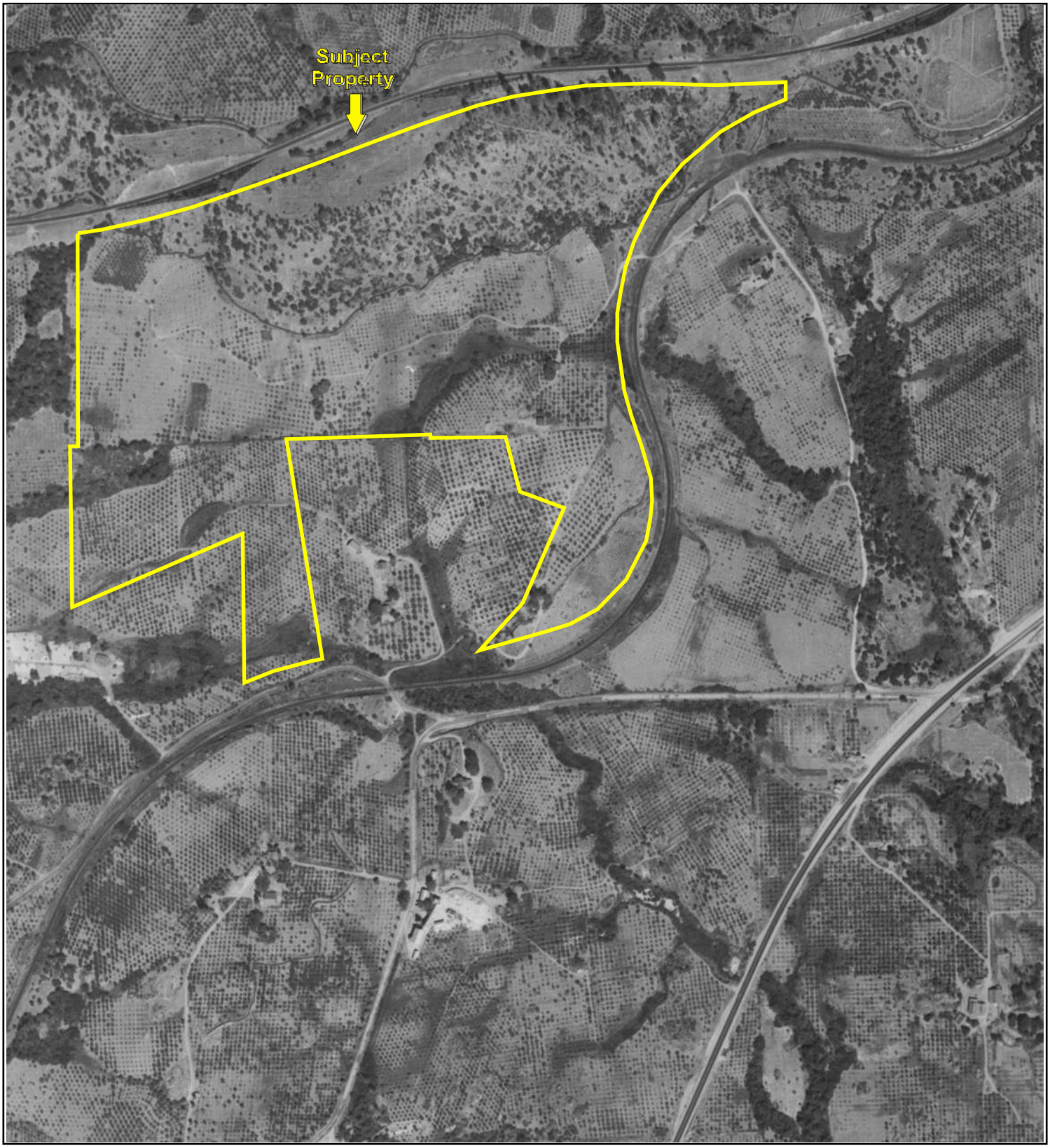


23. Southern adjacent railroad tracks



24. Western adjacent residences

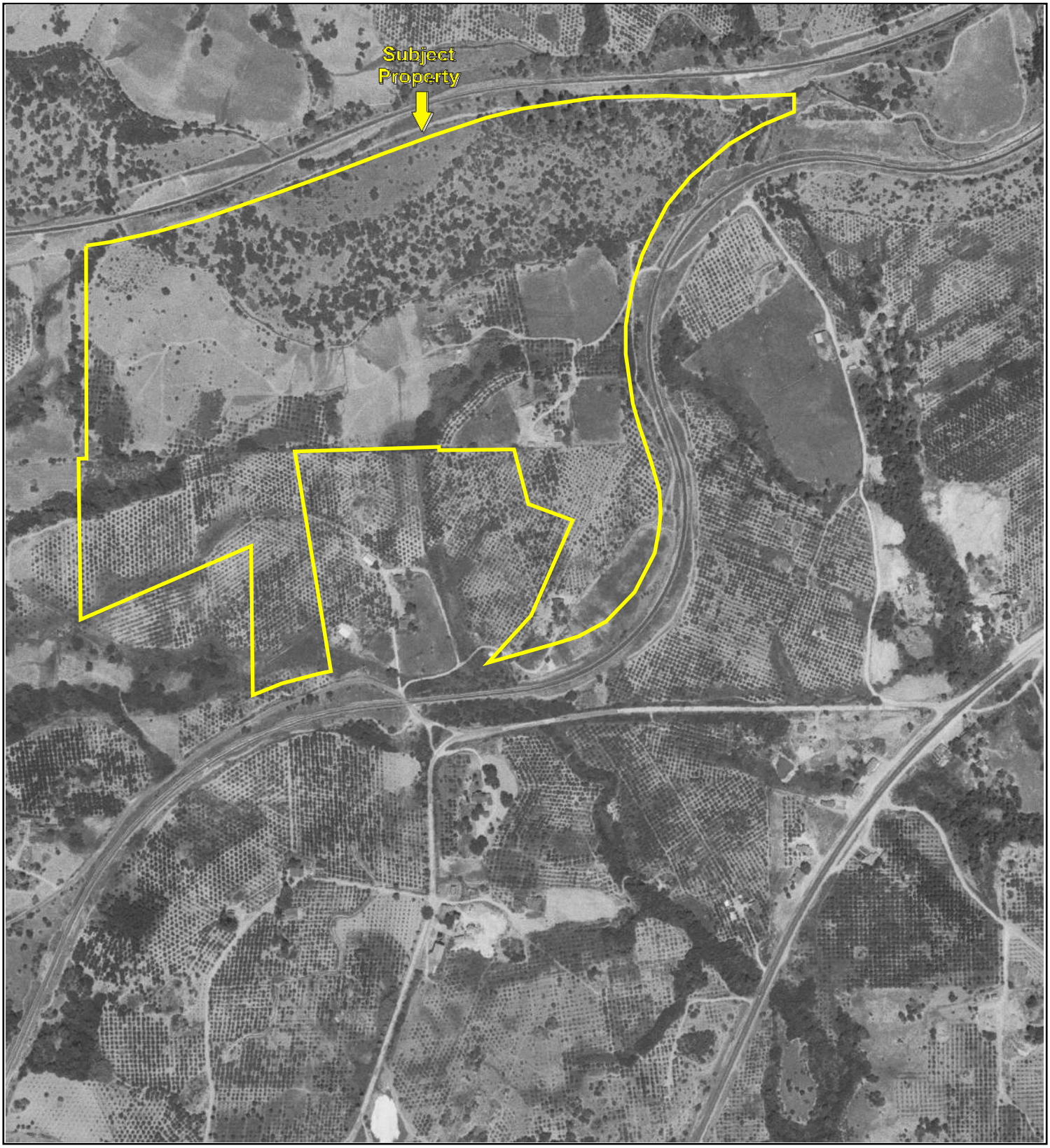
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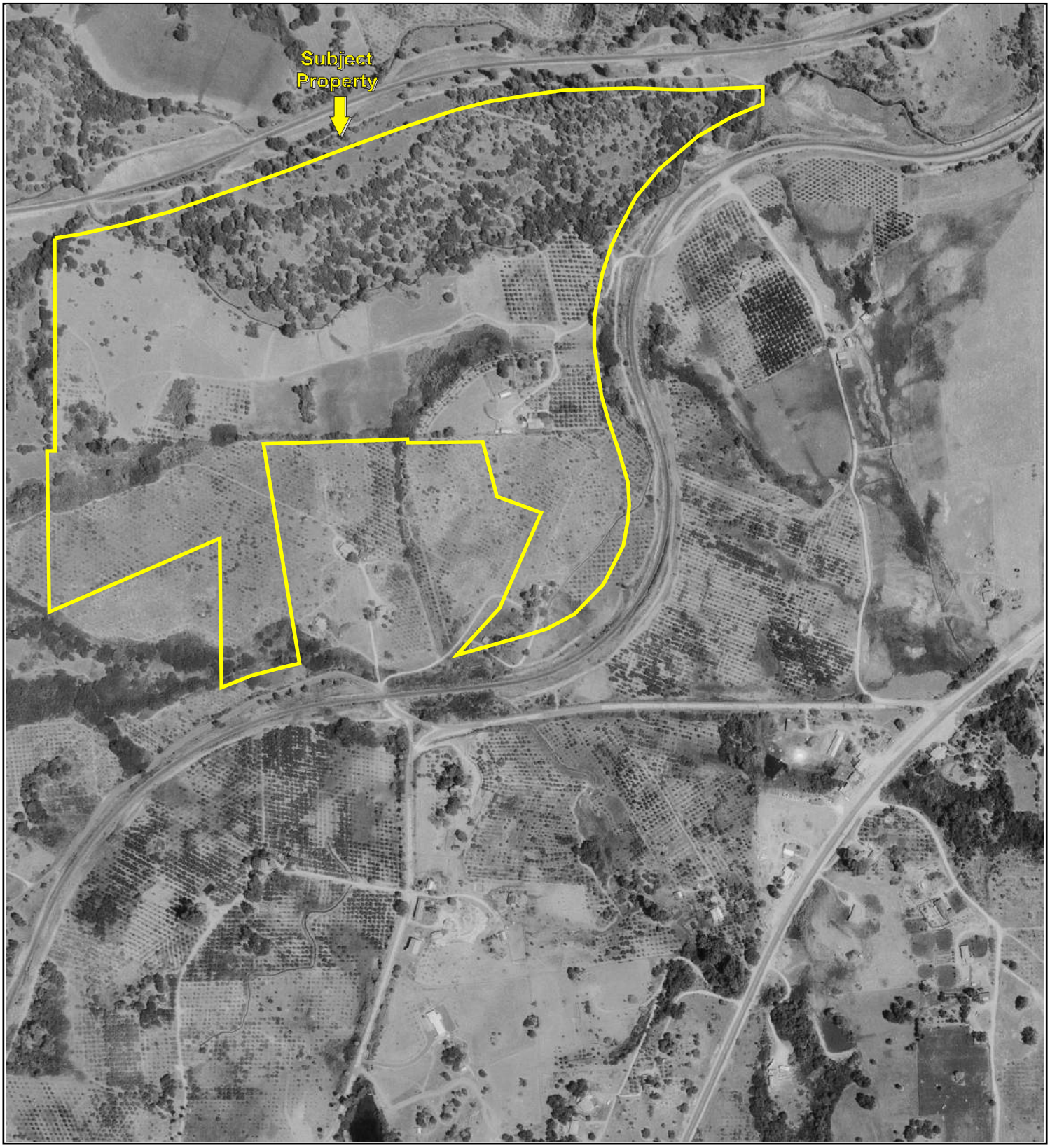
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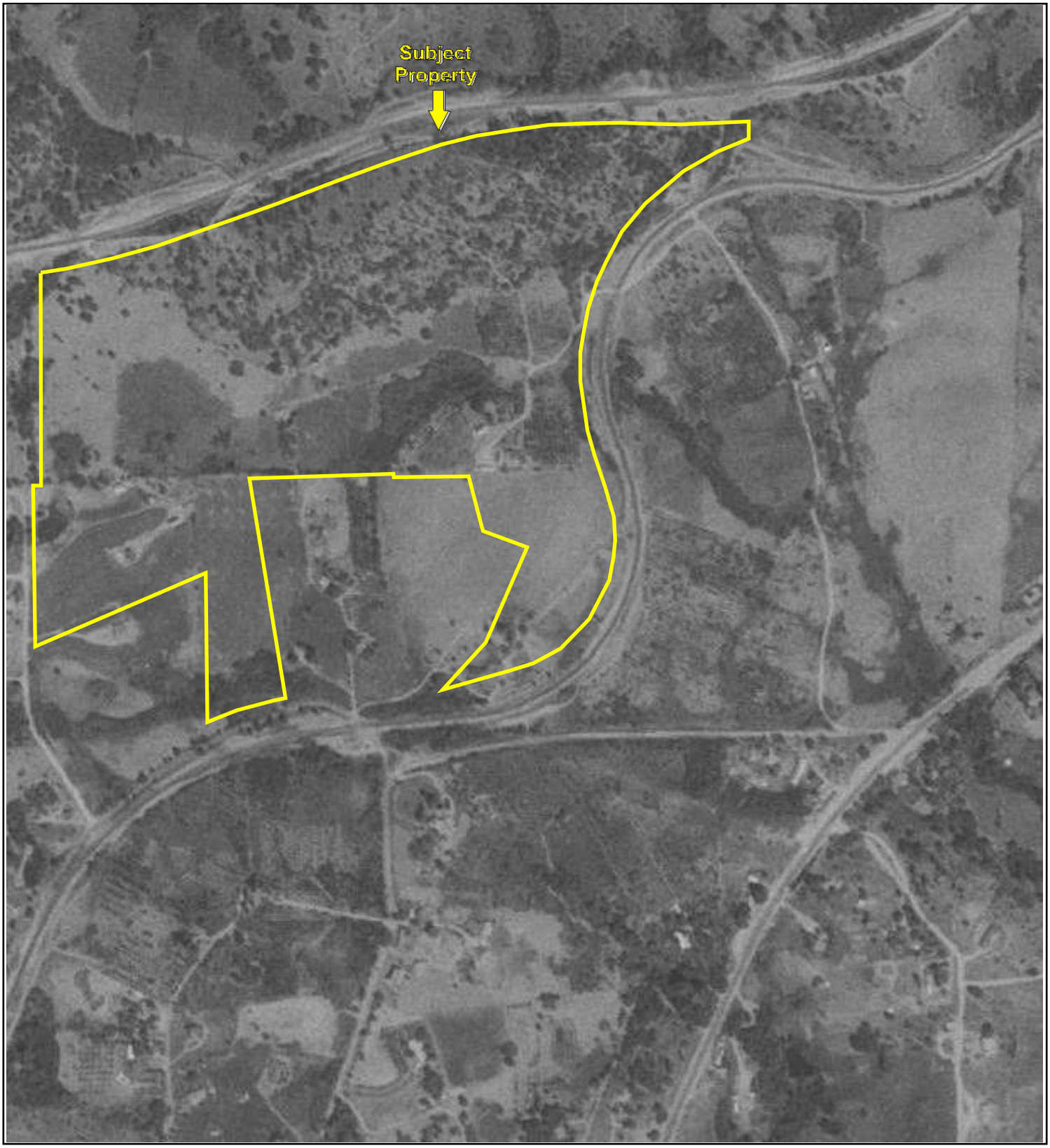
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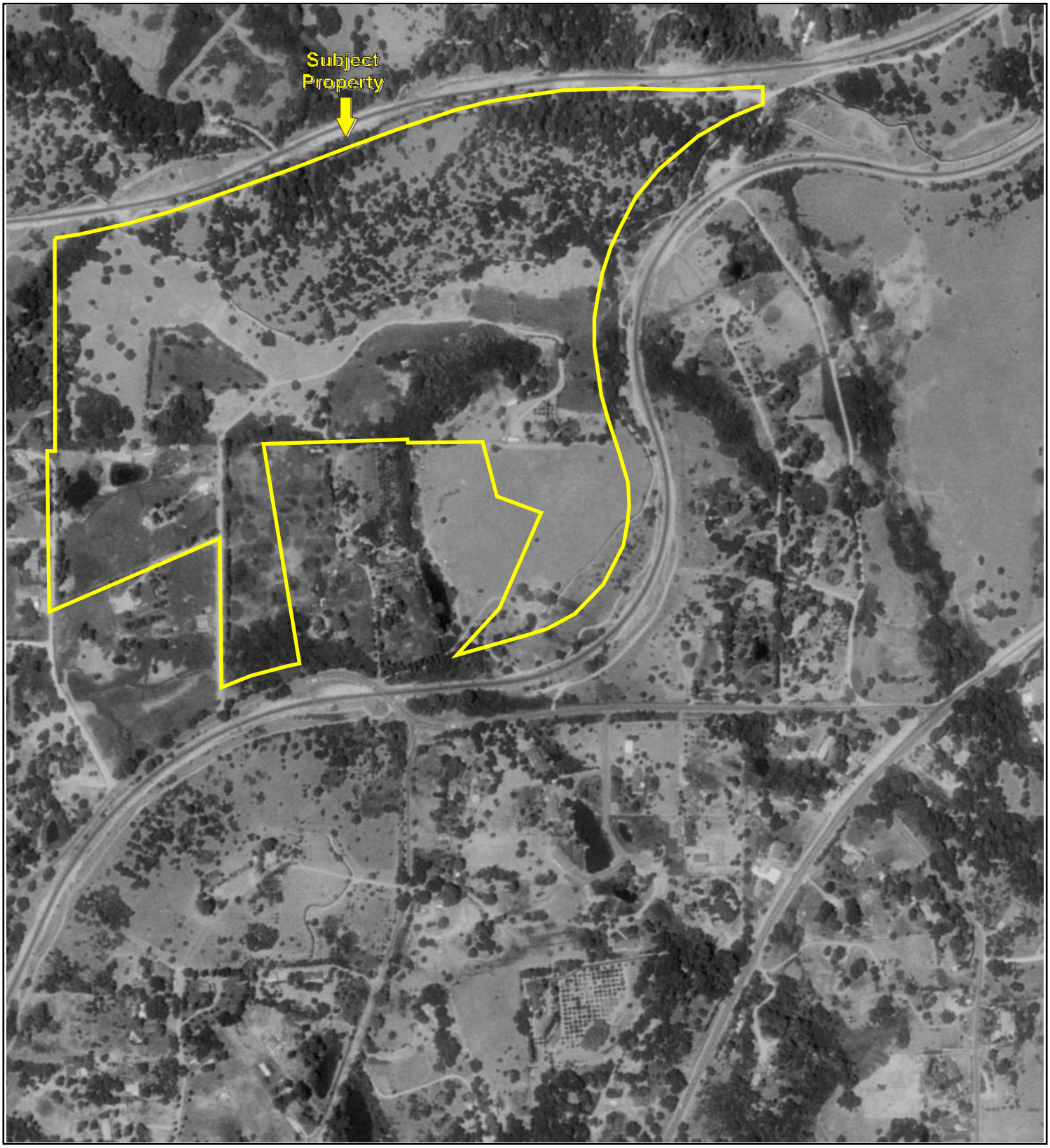


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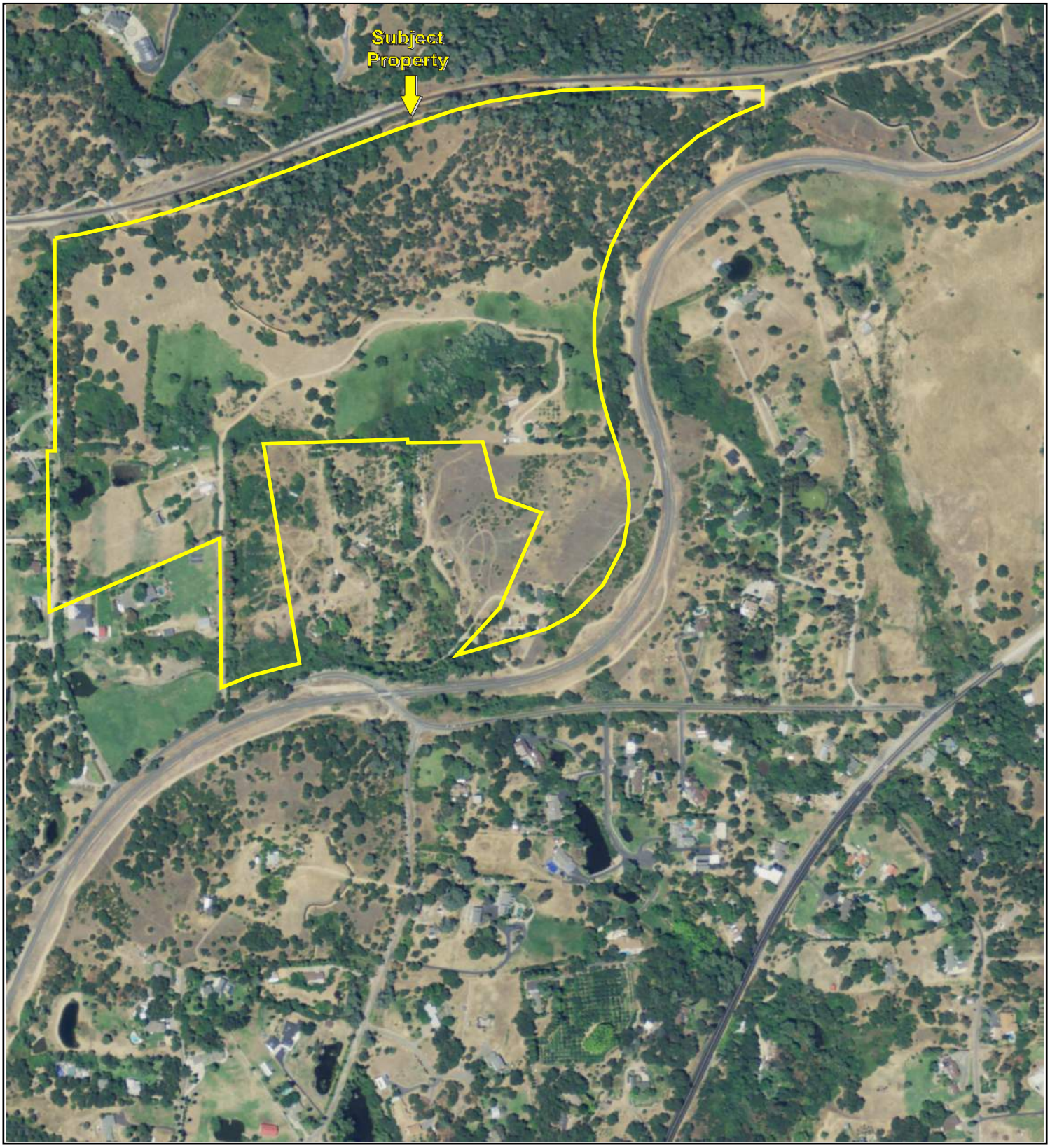


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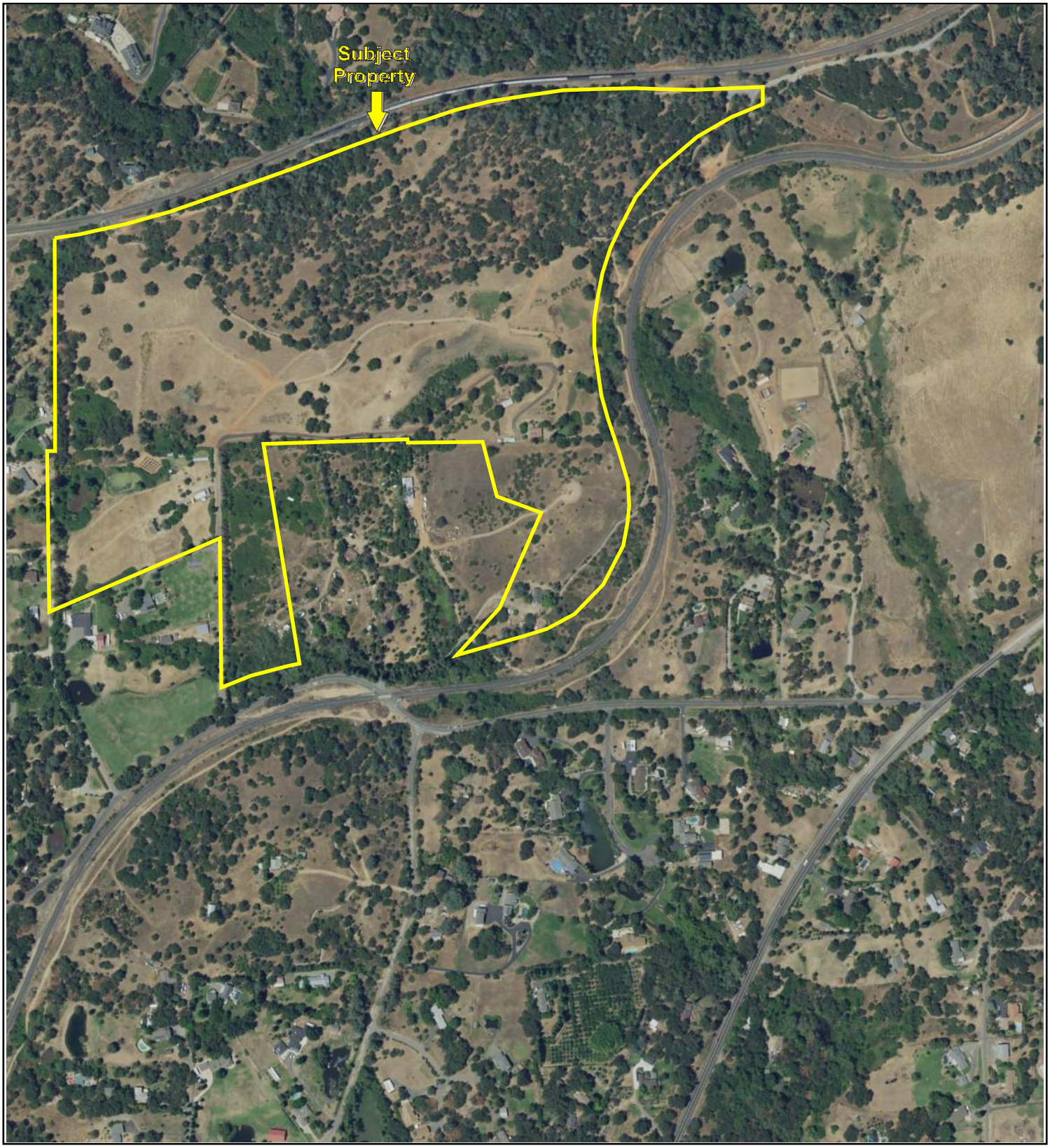
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500 1000 2000

Key: Subject Property



{0}

500 1000 2000

Key: Subject Property

7851 Callison Road
7851 CALLISON RD
Penryn, CA 95663

Inquiry Number: 5996729.5
March 09, 2020

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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with any questions or comments.

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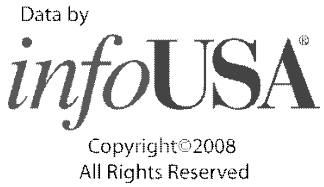
DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

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Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1989	☑	☐	Haines Criss-Cross Directory
1985	☑	☐	Haines Criss-Cross Directory
1980	☑	☐	Haines Criss-Cross Directory
1974	☑	☐	Haines Criss-Cross Directory
1970	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

7851 CALLISON RD
Penryn, CA 95663

Year	*CD Image*	*Source*	
CALLISON RD			
2014	pg A1	EDR Digital Archive	
2010	pg A2	EDR Digital Archive	
2005	pg A3	EDR Digital Archive	
2000	pg A4	EDR Digital Archive	
1995	pg A5	EDR Digital Archive	
1992	pg A6	EDR Digital Archive	
1989	pg A7	Haines Criss-Cross Directory	
1985	pg A8	Haines Criss-Cross Directory	
1980	pg A9	Haines Criss-Cross Directory	
1974	pg A10	Haines Criss-Cross Directory	
1970	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 2014

7042	MCCOY, PATSY
7115	HABECK, DALE P
7245	CLAPTON, J S
7256	DUNCAN, TYLER
	HORKHEIMER, DAVID L
7276	CHAPPELL, DAVID W
7301	OCCUPANT UNKNOWN,
7360	OCCUPANT UNKNOWN,
7375	SINCLAIR, HENRY F
7387	OCCUPANT UNKNOWN,
7396	BANCROFT, ROGER E
7397	OCCUPANT UNKNOWN,
7411	MARKIN, ROGER U
7415	OCCUPANT UNKNOWN,
7585	CANNON, STEVE T
7851	OCCUPANT UNKNOWN,
7880	LAMPHERE, CORD D
	PENRYN ENGINEERING
7945	OCCUPANT UNKNOWN,
7980	BRODOVSKY, ROBERT H
	WHP MOTORSPORTS MARKETING
8050	YATES, JAEL D
8055	THEIS, BERNARD J

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 2010

7051	PATOCKA, SHIRLEY M
7052	YATES, KEITH P
7062	K L WORKS
	LARSEN, KENNETH G
7115	HABECK, DALE P
7245	CLAPTON, J S
7256	DUNCAN, THOMAS F
	DUNCAN, TYLER
7276	CHAPPELL, DAVID W
7301	JONES, LARRY J
7375	OCCUPANT UNKNOWN,
7387	SINCLAIR, KEITH M
7396	BANCROFT, ROGER E
7397	SINCLAIR, HENRY F
7411	MARKIN, ROGER U
7415	OCCUPANT UNKNOWN,
7535	OCCUPANT UNKNOWN,
7585	BEAR RANCH
	CANNON, STEVE T
7715	FORSBERG, JOHN B
7851	HOFFMANN, REBECCA L
7880	LAMPHERE, CORD D
	PENRYN ENGINEERING
7945	KELLY, JOSEPH A
7980	BRODOVSKY, ROBERT H
	WHP MOTORSPORTS MARKETING
8050	YATES, JAEL D
8055	THEIS, BERNARD J

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 2005

7042	OCCUPANT UNKNOWN,
7052	YATES, KEITH P
7062	KL WORKS
	OCCUPANT UNKNOWN,
7115	HABECK, DALE P
7245	CLAPTON, JULIE H
7256	ROY, THOMAS
7276	CHAPPELL, DAVID W
7301	JONES, LARRY J
7360	BANCROFT, ROGER E
7375	SINCLAIR, KEITH M
7387	WENRICH, RICHARD A
7396	MOWER, GREGG N
7411	MARKIN, ROGER U
7415	WHITE, FLOYD C
7520	BEDDES, MAX N
7534	SLINGSBY, ORVILLE F
7585	BEAR RANCH
	MILLWEE, TIM
7715	FORSBERG, JOHN B
7880	LAMPHERE, CORD D
	PENRYN ENGINEERING
7945	OCCUPANT UNKNOWN,
7970	REIMER, JOHN P
7980	BRODOVSKY, ROBERT H
7985	HARE, JEFF D
8050	YATES, JAEL D
8055	THEIS, BERNARD J

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 2000

7052	KEITH YATES DESIGN GROUP
7062	KL WORKS
7115	HABECK, DALE P
7245	CLAPTON, J S
7256	FOXEN, FRED C
7276	CHAPPELL, DAVID
7301	JONES, LARRY J
7375	SINCLAIR CONCRETE A CALIFORNIA
7396	MOWER, GREGG
7397	ALDRIDGE, D
7415	WHITE, FLOYD C
7520	BEDDES, MAX
7534	SLINGSBY, ORVILLE F
7880	LAMPHERE, CORD
7945	KELLY, JOSEPH A
7970	REIMER, JOHN P
7980	BRODOVSKY, ROBERT H
7985	HARE, JEFFREY D
8085	PAGE, EUGENE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 1995

7115	HABECK, DALE P
7276	CHAPPELL, DAVID
7301	JONES, LARRY J
7375	SINCLAIR CONCRETE
	SINCLAIR, KARIN A
7396	SANFORD, MARLIN E
7534	SLINGSBY, ORVILLE F
7585	ELKIN, BARRY
7851	BATES, MICHAEL O
7880	SUSBILLA, LARRY
7970	REIMER, JOHN P

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALLISON RD 1992

7042	WHIPPLE, LONNA
7115	HABECK, DALE P
7245	CLAPTON, J S
7256	FOXEN, FRED C
7276	CHAPPELL, DAVID
	NURSERY STOCK LIQUIDATORS
7301	JONES, LARRY J
7387	SIDEBOTTOM, DANZEIL R
7396	SANFORD, MARLIN E
7397	ALDRIDGE, D
7520	BEDDES, MAX
7534	SLINGSBY, ORVILLE F
7585	ELKIN, BARRY
7880	SUSBILLA, LARRY
7985	SLEEPER, BOB
8085	PAGE, EUGENE

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

CALLISON RD 1989

CALLISON RD 95663
PENRYN

7030	XXXX	00	
7042	WHIPPLE Lonna	663-1930	2
7052	XXXX	00	
7062	ESTES Jasper A	663-2780	
7115	HABECK Dale P	663-3987	
7245	CLAPTON J S Mrs	663-3820	
7256	FOXEN Fred C	663-2137	
7276	CHAPPELL Cathy	663-3782	+9
	CHAPPELL David	663-3782	+9
7301	JONES Larry J	663-2665	
7375	EBERWEIN R Paul	663-2580	
7387	SIDEBOTTOM Denzil R	663-2570	
7396	XXXX	00	
7397	ALDRIDGE D	663-2231	
7411	ALDRIDGE Ernest	663-1653	1
	ALDRIDGE Maxine	663-1653	
7501	XXXX	00	
7520	BEDDES Max	663-2995	
7526	XXXX	00	
7534	SLINGSBY Orville F	663-1413	0
7585	ELKIN Barry	663-2585	
	ELKIN Charlotte	663-2585	
7600	KNISLEY Bill	663-2384	
	KNISLEY Lynn	663-2384	
7851	XXXX	00	
7985	NEWELL Debrah	663-3452	
	NEWELL Josh	663-1797	+9
	NEWELL Ron	663-3452	
	NEWELL Tanya	663-1797	+9
8050	XXXX	00	
8055	XXXX	00	
8085	PAGE Eugene	663-3684	
8099	XXXX	00	

* 0 BUS 33 RES 4 NEW

Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

CALLISON RD 1985

CALLISON RD 95663
PENRYN

7030	XXXX	00	
7042	WHIPPLE LONNA	663-1930	2
7052	ENGLAND CLIFF L	663-1862	2
7062	ESTES JASPER A	663-2780	6
7115	HABECK DALE P	663-3987	9
7245	CLAPTON J S MRS	663-3820	
7256	FOXEN FRED C	663-2137	
7276	GIBBONS V A	663-1931	2
	WHIPPLE S L	663-1675	1
7301	JONES LARRY J	663-2665	9
7375	EBERWEIN R PAUL	663-2580	
7387	SIDEBOTTOM DENZIL R	663-2570	
7396	LINDSAY JACK	663-2747	0
7397	ALDRIDGE D	663-2231	
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7534	SLINGSBY ORVILLE F	663-1413	0
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7600	KNISLEY BILL	663-2384	0
7851	HARLOW ROLLIN R	663-2020	0
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8050	YATES JOHN N	663-1702	3
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Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

CALLISON RD 1980

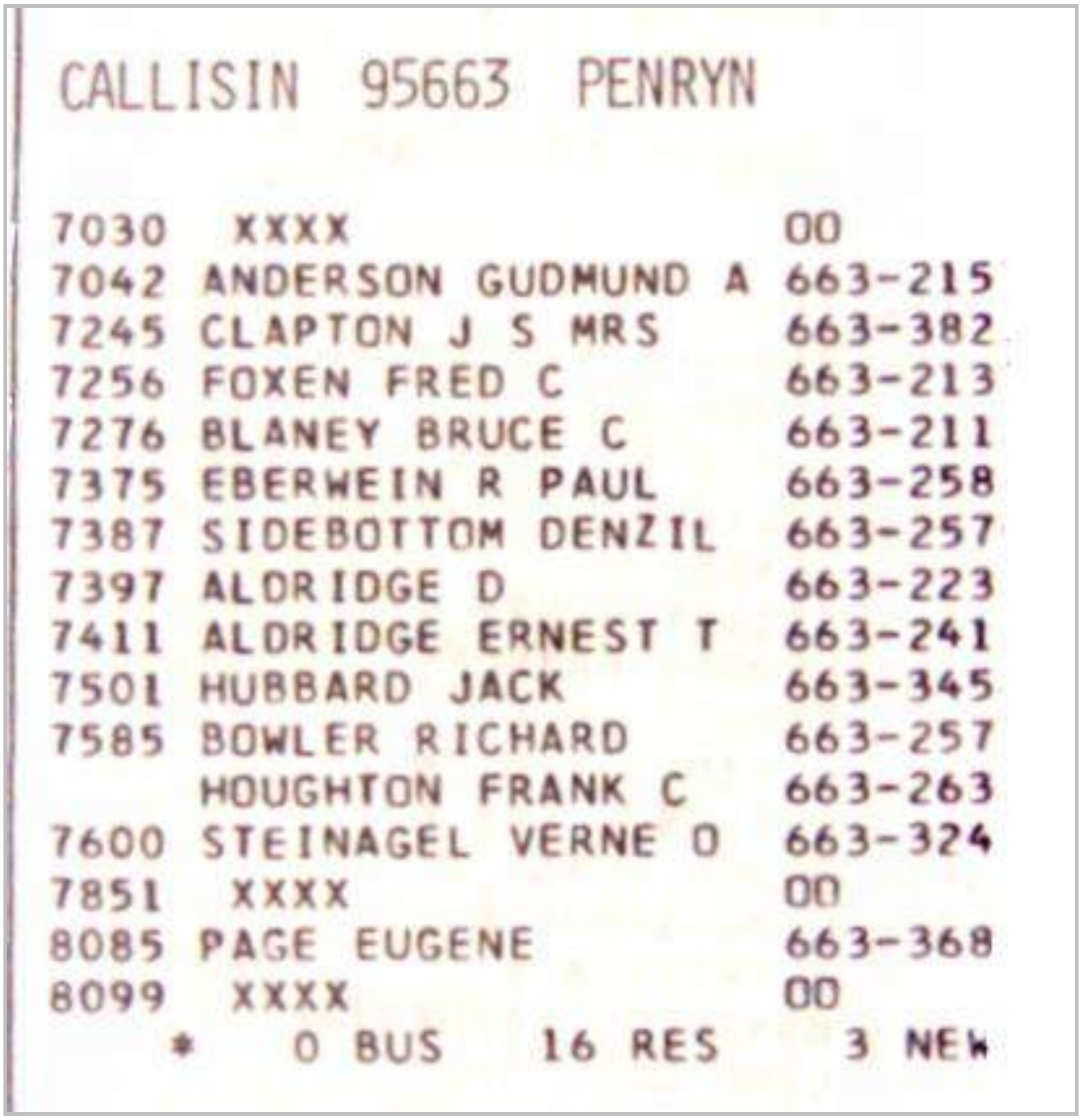
CALLISON 95663 PENRYN

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7115	HABECK DALE P	663-3987	9
7245	CLAPTON J S MRS	663-3820	
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7276	BLANEY BRUCE C	663-2112	
7301	JONES LARRY J	663-2665	9
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7387	SIDEBOTTOM DENZIL	663-2570	4
7396	LINDSAY JACK	663-2747	+0
7397	ALDRIDGE D	663-2231	
7411	XXXX	00	
7501	HUBBARD JACK	663-3450	2
7520	BEDDES MAX	663-2995	6
7526	TOWNLEY ROBT O	663-2854	5
7534	SLINGSBY ORVILLE F	663-1413	+0
7585	BOWLER RICHARD	663-2574	+0
7600	KNISLEY BILL	663-2384	+0
7851	HARLOW ROLLIN R	663-2020	+0
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8085	PAGE EUGENE	663-3684	
8099	XXXX	00	

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Target Street	Cross Street	Source
✓	-	Haines Criss-Cross Directory

CALLISON RD 1974



CALLISIN 95663 PENRYN

7030	XXXX	OO
7042	ANDERSON GUDMUND A	663-215
7245	CLAPTON J S MRS	663-382
7256	FOXEN FRED C	663-213
7276	BLANEY BRUCE C	663-211
7375	EBERWEIN R PAUL	663-258
7387	SIDEBOTTOM DENZIL	663-257
7397	ALDRIDGE D	663-223
7411	ALDRIDGE ERNEST T	663-241
7501	HUBBARD JACK	663-345
7585	BOWLER RICHARD	663-257
	HOUGHTON FRANK C	663-263
7600	STEINAGEL VERNE O	663-324
7851	XXXX	OO
8085	PAGE EUGENE	663-368
8099	XXXX	OO

* 0 BUS 16 RES 3 NEW

7851 Callison Road

7851 CALLISON RD

Penryn, CA 95663

Inquiry Number: 5996729.3

March 04, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/04/20

Site Name:

7851 Callison Road
7851 CALLISON RD
Penryn, CA 95663
EDR Inquiry # 5996729.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Aimee Tamayo

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PO # 20-277052.1

Project 20-277052.1

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Sanborn® Library search results

Certification #: FA37-456E-9233

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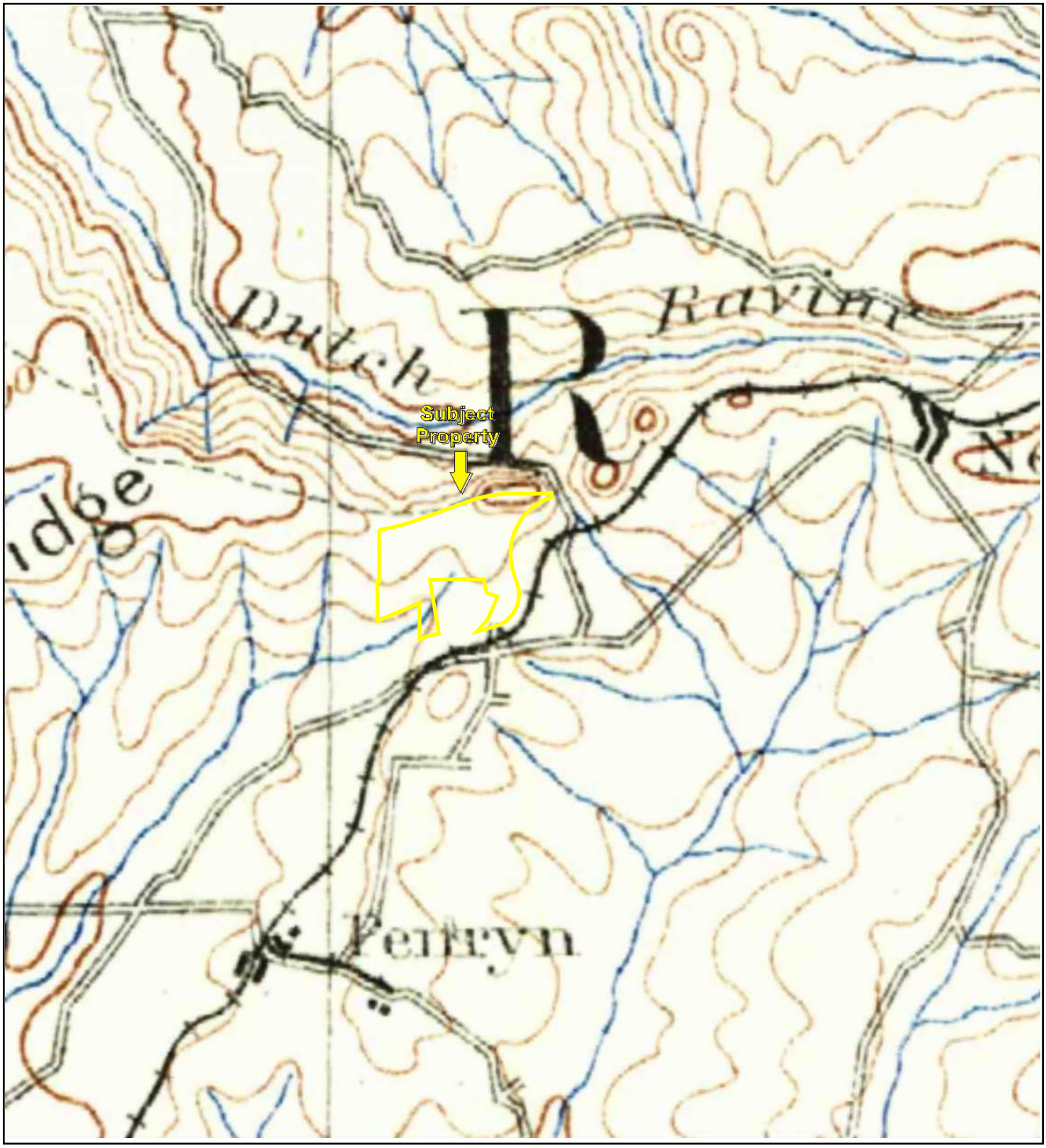
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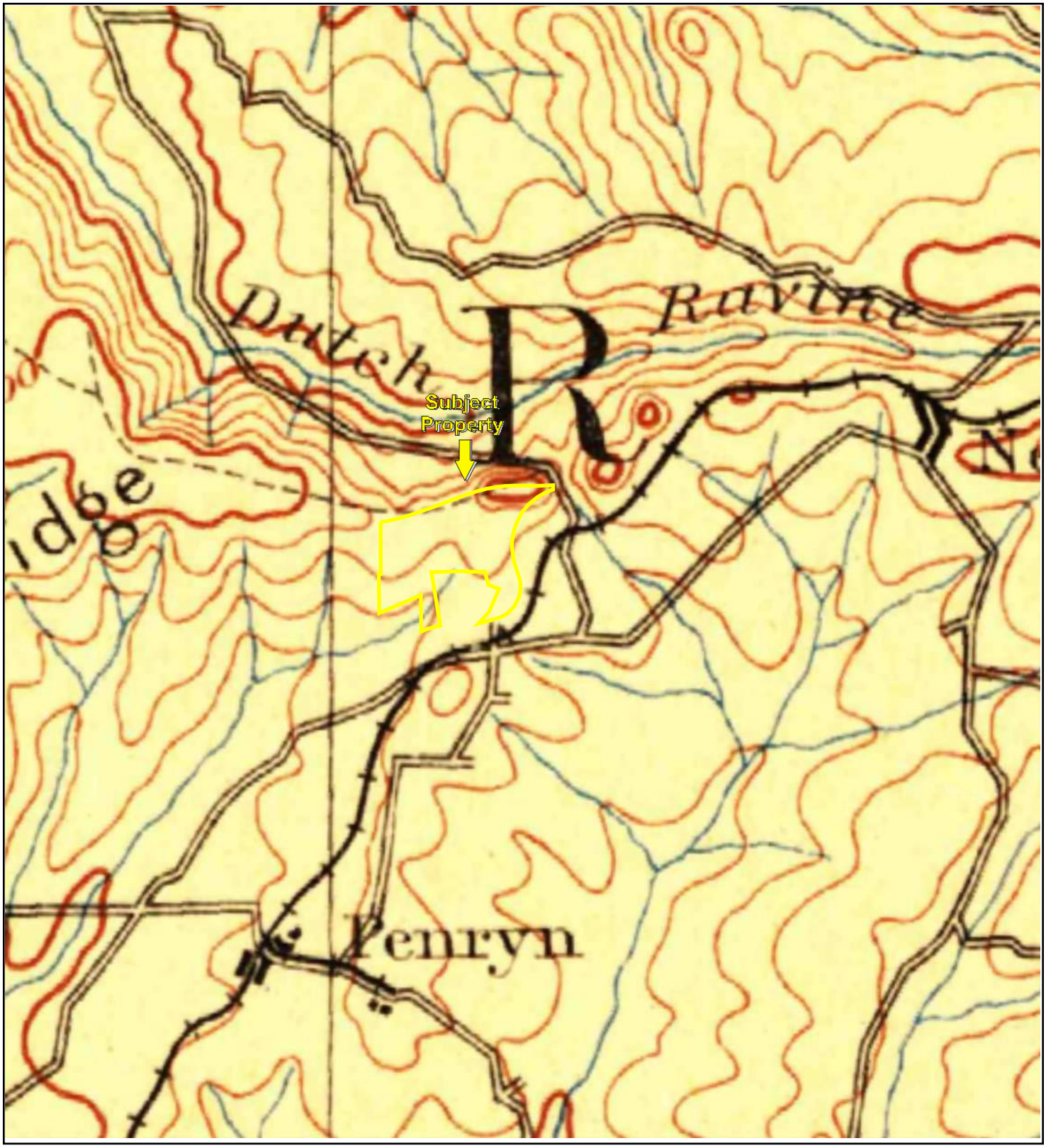


TP, Sacramento, 1891, 30-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

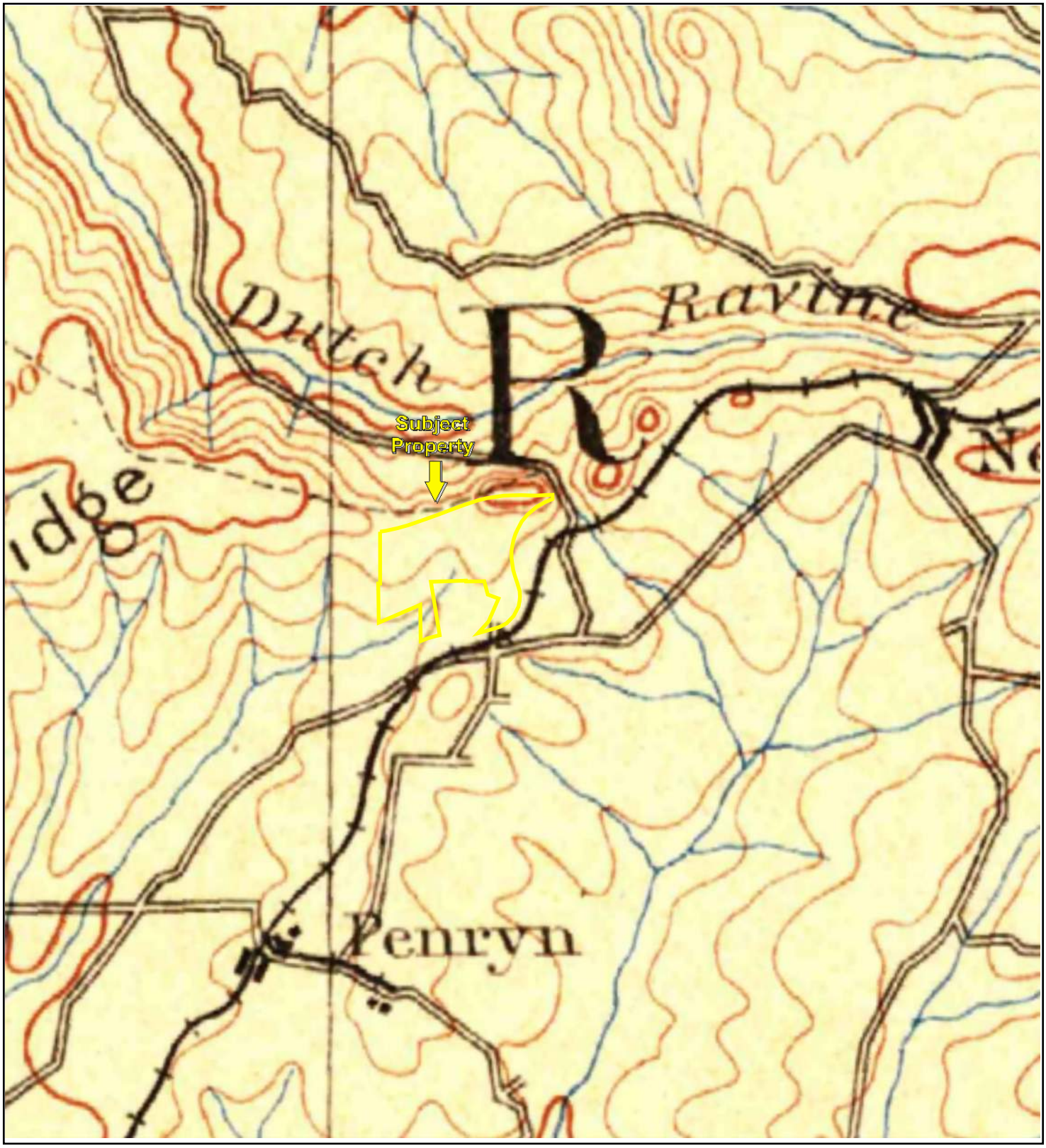


TP, Sacramento, 1892, 30-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

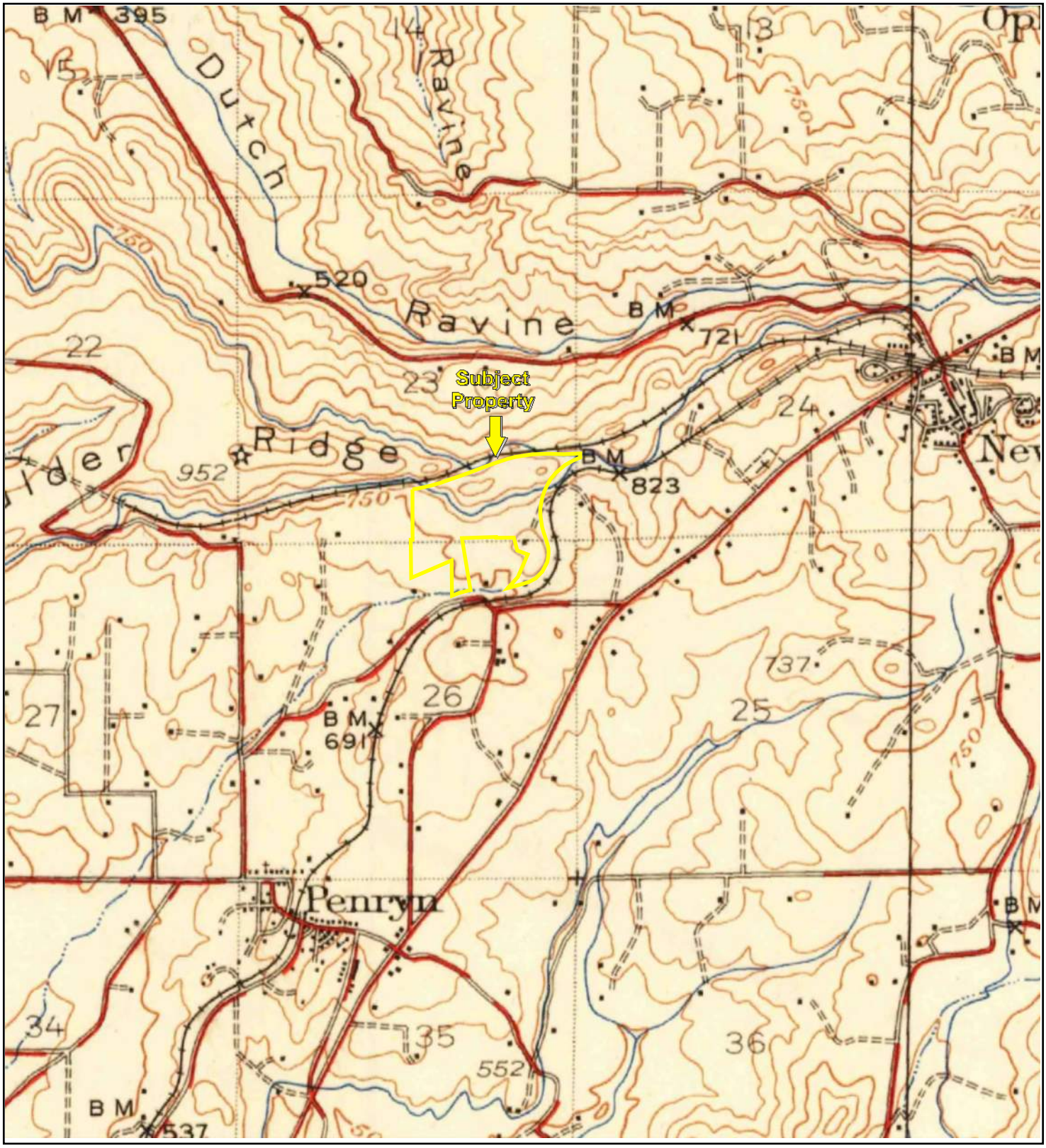


TP, Sacramento, 1893, 30-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

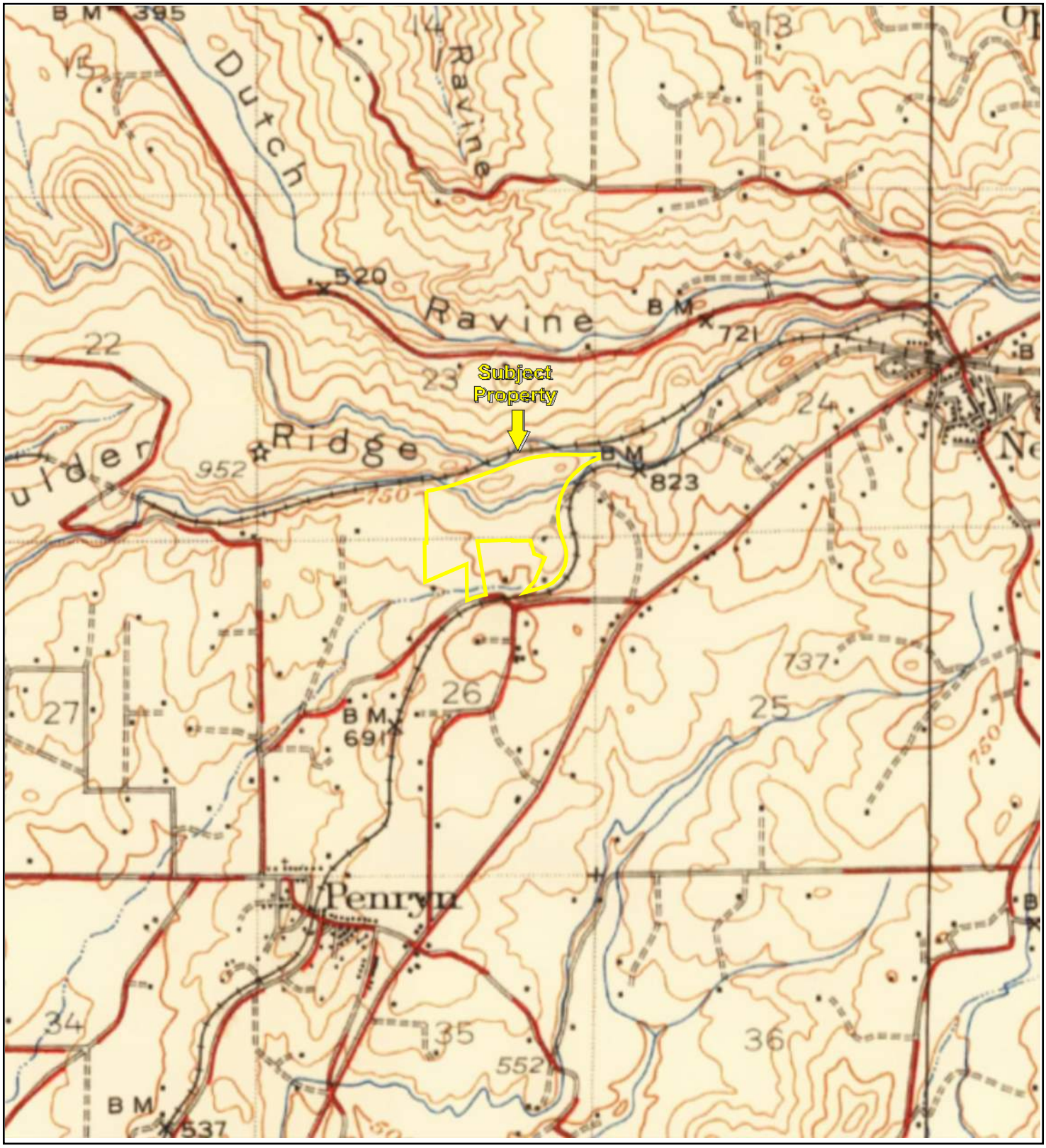


TP, Auburn, 1944, 15-minute

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Key: Subject Property

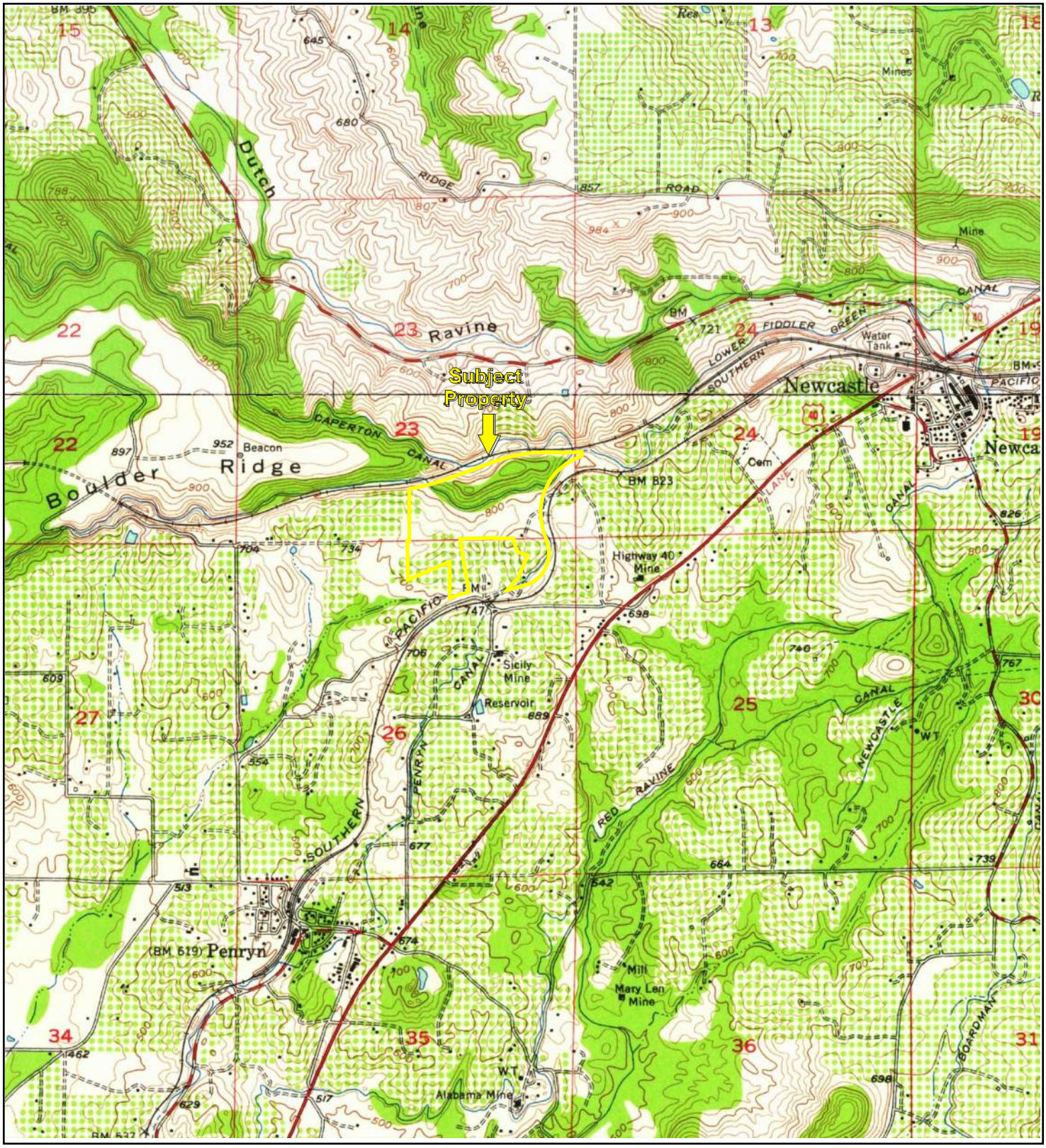


TP, AUBURN, 1947, 15-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property



TP, Rocklin, 1954, 7.5-minute
N, Gold Hill, 1954, 7.5-minute

0 Miles 0.25 0.5 1 1.5

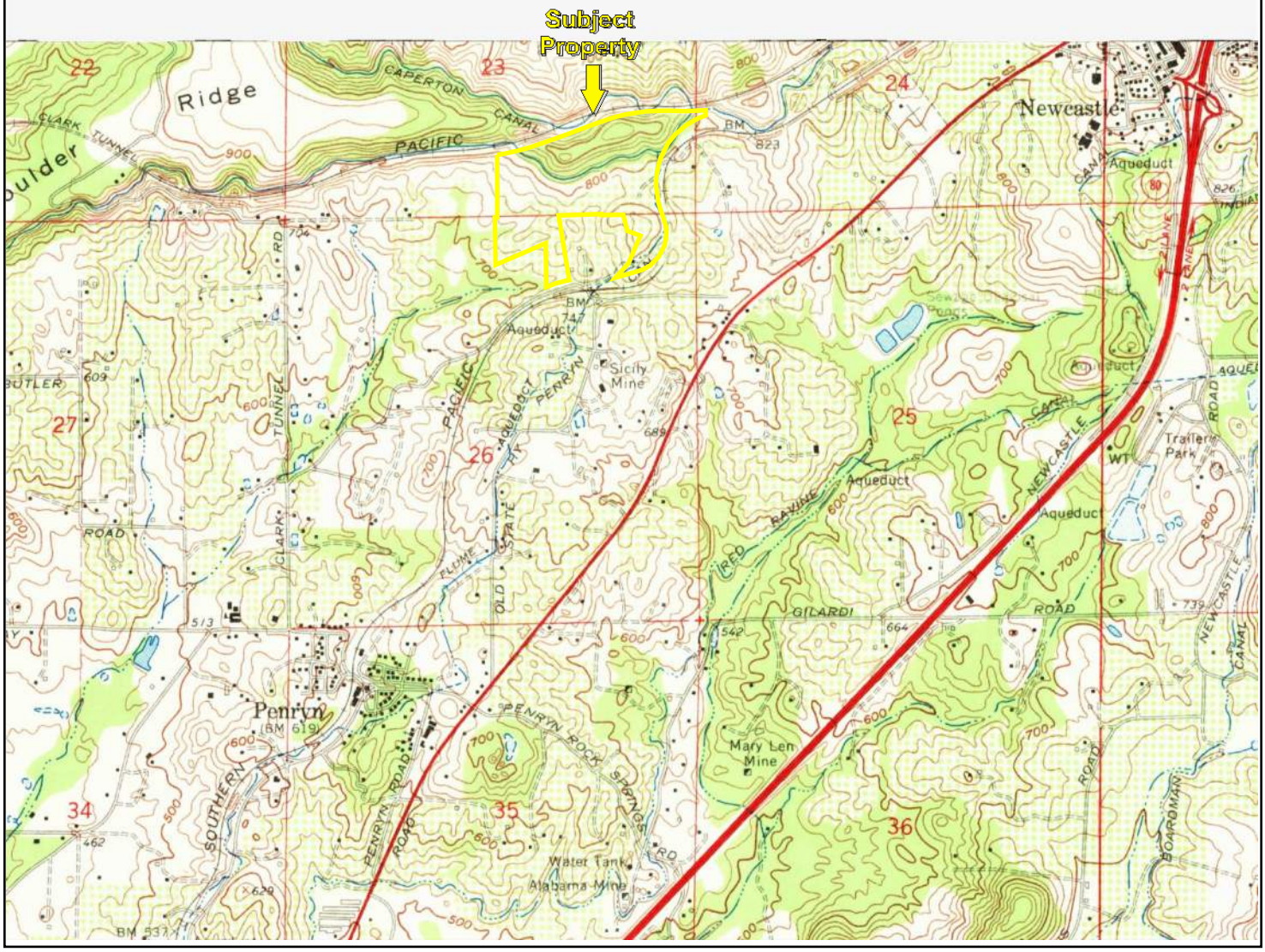
N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-277052.1

PARTNER



TP, Rocklin, 1967, 7.5-minute

0 Miles 0.25 0.5 1 1.5

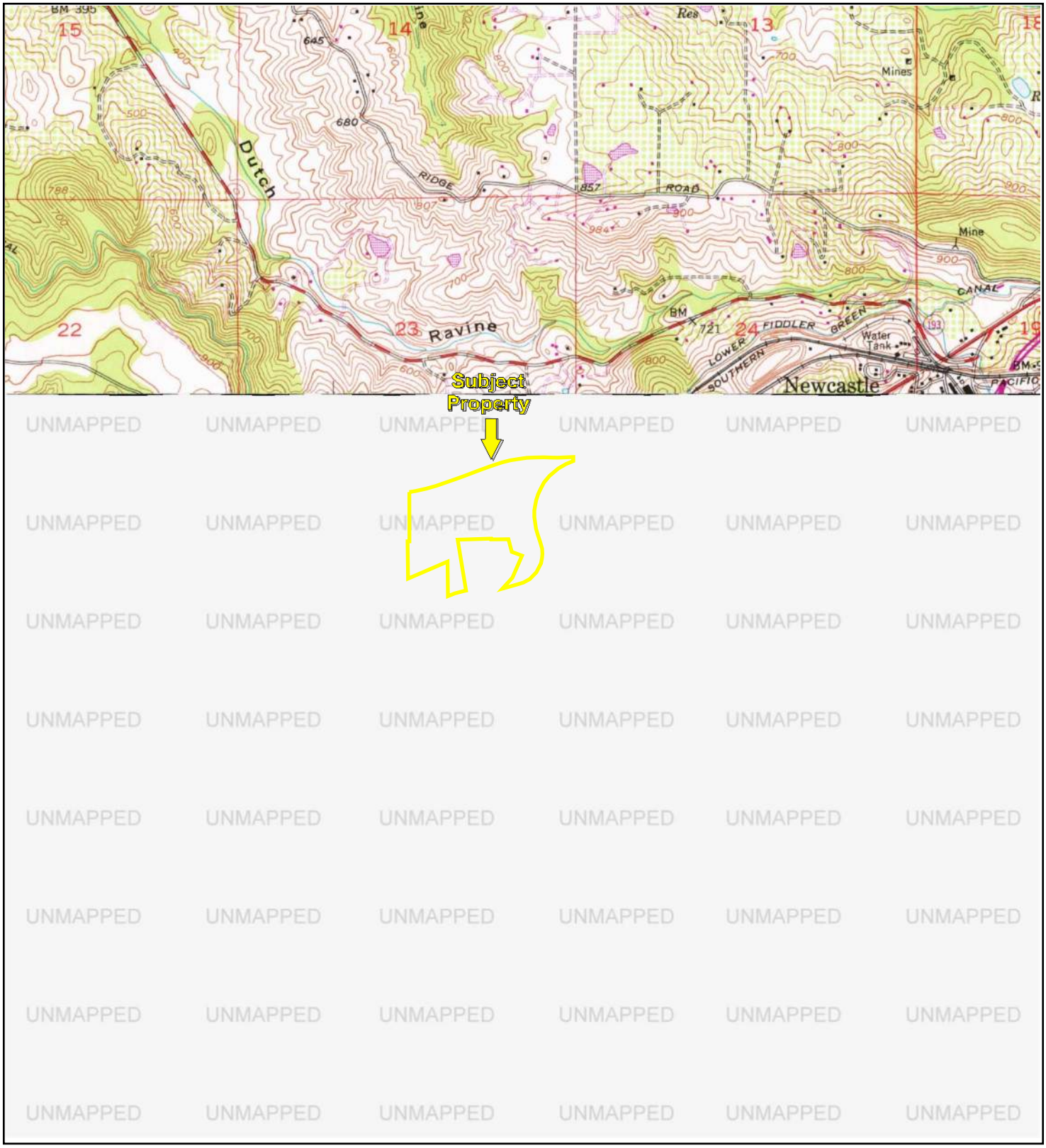
N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-277052.1

PARTNER



N, Gold Hill, 1973, 7.5-minute

0 Miles 0.25 0.5 1 1.5

N

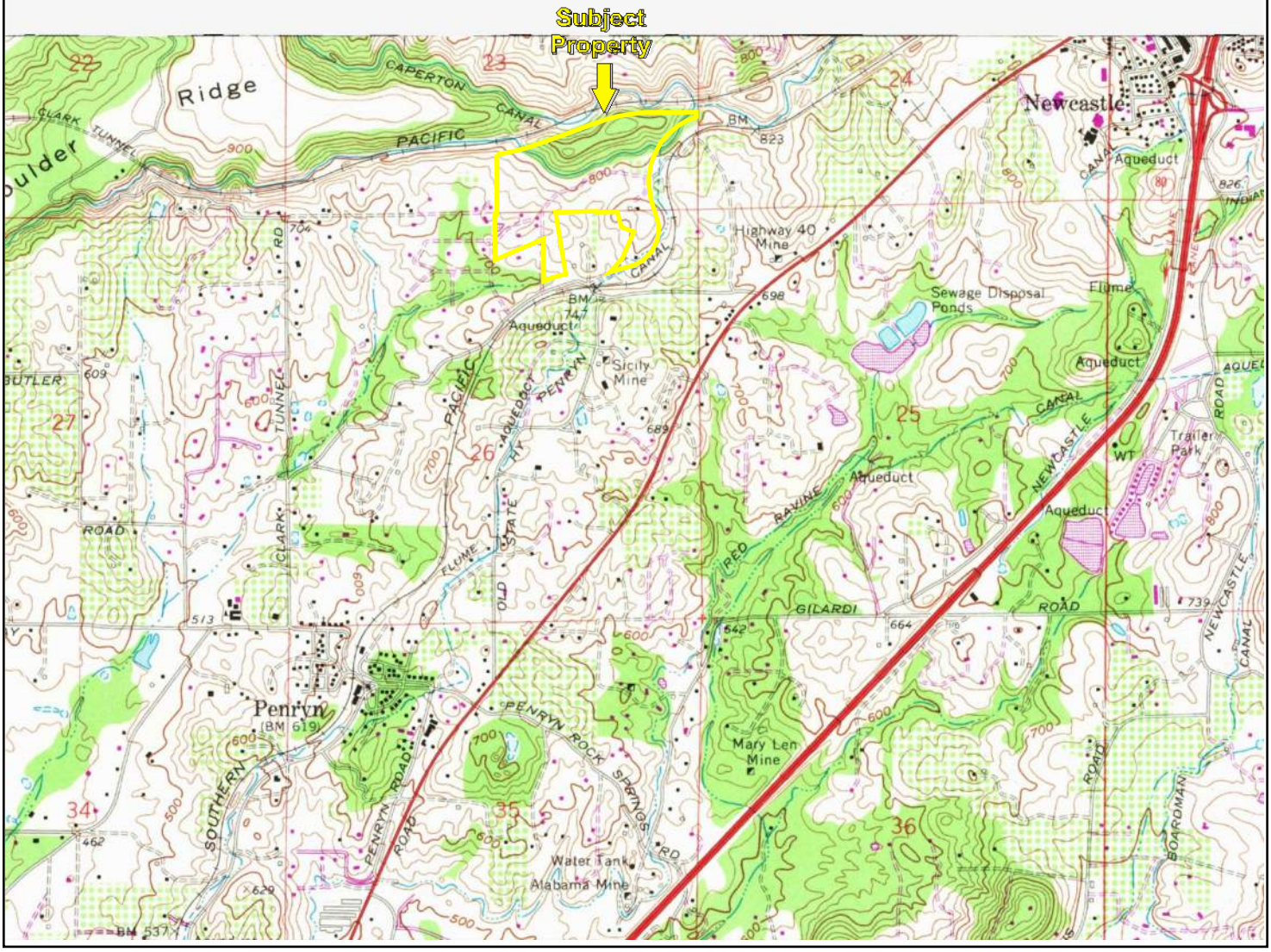
Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-277052.1

PARTNER

UNMAPPED



TP, Rocklin, 1981, 7.5-minute

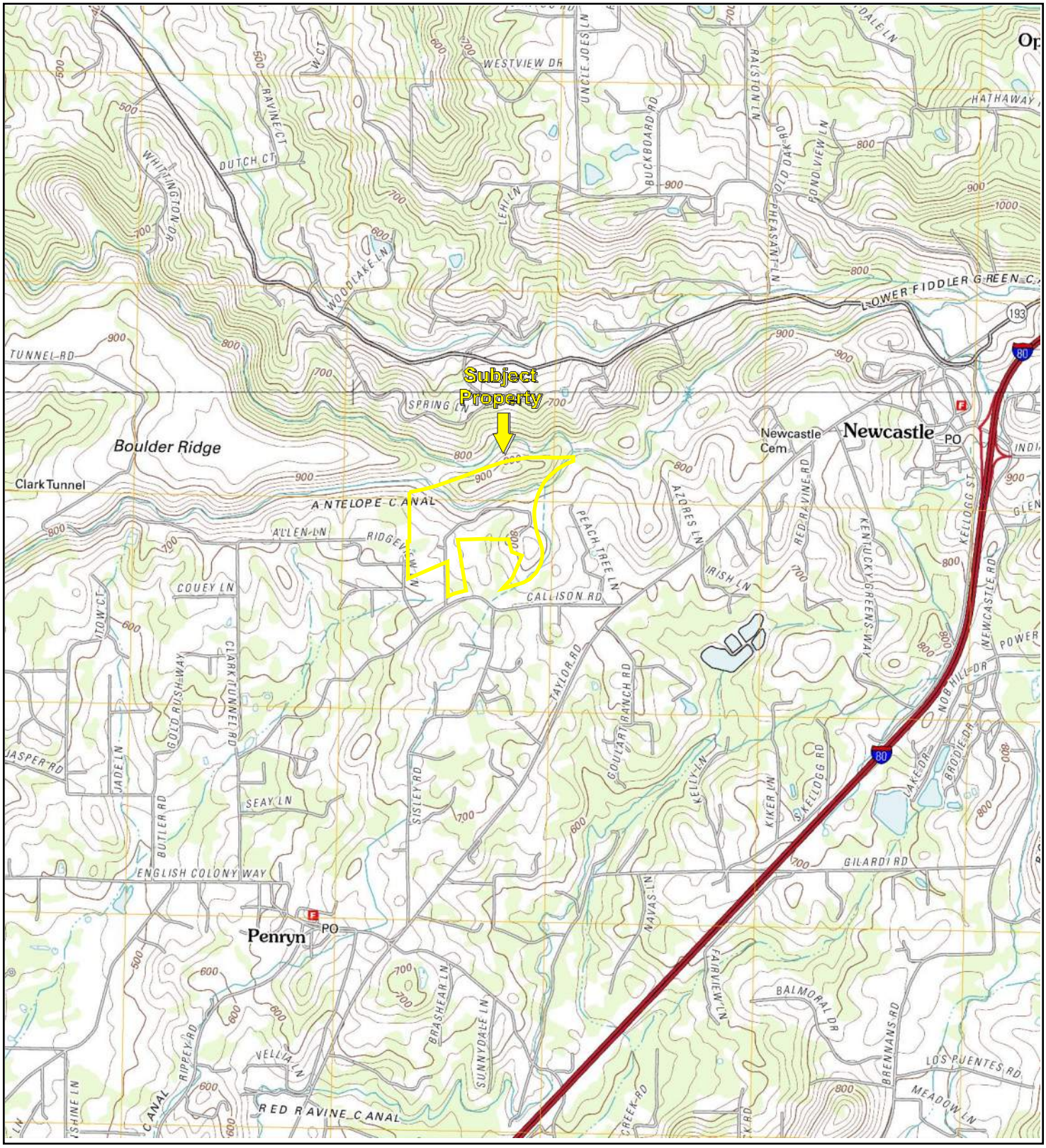
0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-277052.1



TP, Rocklin, 2012, 7.5-minute
N, Gold Hill, 2012, 7.5-minute

0 Miles 0.25 0.5 1 1.5

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-277052.1

Information as of Lien Date	**January 1st 2019**

Navigation

New Search Print

View Maps

Property Information

Assessor ID Number	**032-124-058-000**
Tax Rate Area (TRA)	**078157**
Last Recording Date	**3/16/2015**
Current Doc No.	**2015R0018759**
Situs Address	**7851 CALLISON RD PENRYN CA 95663**
Acres	**2.90**
Lot Size(SqFt)	**0.00**
Asmt Description	**2.9 A SEC 26 12 7**
Asmt Status	**ACTIVE**

Roll Values

Land	**80741**
Structure	**92515**
Fixtures	**0**
Growing	**0**
Total Land and Improvements	**173256**
Manufactured Home	**0**
Personal Property	**0**
Homeowners Exemption	**0**
Other Exemption	**0**
Net Assessment	**173256**

Building Description(s)

Building Seq. Number	**1**
Unit Seq. Number	**0**
Building Code	**1**
Current Doc No.	**2015R0018759**
Number Of Units	**1**
Building Type	
Building Square Footage	**1472**
Garage Square Footage	**480.00**
Unfinished Square Footage	
Year Built	**1948**
Bedrooms	**3**
Full Baths	**2**
Half Baths	**0**
Fireplaces	
Pools	

Navigation

New Search

Information as of Lien Date	**January 1st 2019**

Navigation

New Search Print

View Maps

Property Information

Assessor ID Number	**031-220-061-000**
Tax Rate Area (TRA)	**081020**
Last Recording Date	**7/8/2016**
Current Doc No.	**2016R0054572**
Situs Address	**7615 CALLISON RD PENRYN CA 95663**
Acres	**30.80**
Lot Size(SqFt)	
Asmt Description	**30.8 AC SEC 23 12 7**
Asmt Status	**ACTIVE**

Roll Values

Land	**326052**
Structure	**3121**
Fixtures	**0**
Growing	**0**
Total Land and Improvements	**329173**
Manufactured Home	**0**
Personal Property	**0**
Homeowners Exemption	**0**
Other Exemption	**0**
Net Assessment	**329173**

Building Description(s)

Building Seq. Number	
Unit Seq. Number	**0**
Building Code	
Current Doc No.	**2016R0054572**
Number Of Units	
Building Type	
Building Square Footage	
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	
Bedrooms	
Full Baths	
Half Baths	
Fireplaces	
Pools	

Navigation

New Search

Information as of Lien Date	**January 1st 2019**

Navigation

New Search **Print**

View Maps

Property Information

Assessor ID Number	**031-220-062-000**
Tax Rate Area (TRA)	**081020**
Last Recording Date	**3/29/2019**
Current Doc No.	**2019R0019540**
Situs Address	**7665 CALLISON RD**
	PENRYN CA 95663
Acres	**22.86**
Lot Size(SqFt)	**995782.00**
Asmt Description	**22.86 AC SEC 23 12 7 POR RES D MBR 2019R0019536**
Asmt Status	**ACTIVE**

Roll Values

Land	**591404**
Structure	**161262**
Fixtures	**0**
Growing	**0**
Total Land and Improvements	**752666**
Manufactured Home	**0**
Personal Property	**0**
Homeowners Exemption	**0**
Other Exemption	**0**
Net Assessment	**752666**

Building Description(s)

Building Seq. Number	**1**
Unit Seq. Number	**0**
Building Code	**1**
Current Doc No.	**2019R0019540**
Number Of Units	**1**
Building Type	**Residence**
Building Square Footage	**1308**
Garage Square Footage	**0.00**
Unfinished Square Footage	**364.00**
Year Built	**1949**
Bedrooms	**3**
Full Baths	**1**
Half Baths	**0**
Fireplaces	**1**
Pools	
Building Seq. Number	**2**
Unit Seq. Number	**0**
Building Code	**2**
Current Doc No.	**2019R0019540**

Number Of Units	
Building Type	**Barn**
Building Square Footage	**800**
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	**1950**
Bedrooms	
Full Baths	
Half Baths	
Fireplaces	
Pools	
Building Seq. Number	**4**
Unit Seq. Number	**0**
Building Code	**4**
Current Doc No.	**2019R0019540**
Number Of Units	
Building Type	**Other improvements**
Building Square Footage	**120**
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	**1955**
Bedrooms	
Full Baths	
Half Baths	
Fireplaces	
Pools	

Navigation

New Search

Information as of Lien Date	**January 1st 2019**

Navigation

New Search Print

View Maps

Property Information

Assessor ID Number	**032-124-079-000**
Tax Rate Area (TRA)	**078157**
Last Recording Date	**3/29/2019**
Current Doc No.	**2019R0019540**
Situs Address	
Acres	**3.70**
Lot Size(SqFt)	
Asmt Description	**3.7 AC SEC 26 12 7 POR RES D MBR 2019R0019536**
Asmt Status	**ACTIVE**

Roll Values

Land	
Structure	
Fixtures	
Growing	
Total Land and Improvements	
Manufactured Home	
Personal Property	
Homeowners Exemption	
Other Exemption	
Net Assessment	

Building Description(s)

Building Seq. Number	
Unit Seq. Number	**0**
Building Code	
Current Doc No.	**2019R0019540**
Number Of Units	
Building Type	
Building Square Footage	
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	
Bedrooms	
Full Baths	
Half Baths	
Fireplaces	
Pools	

Navigation

New Search

Information as of Lien Date	**January 1st 2019**

Navigation

New Search Print

View Maps

Property Information

Assessor ID Number	**032-124-080-000**
Tax Rate Area (TRA)	**078157**
Last Recording Date	**4/18/2019**
Current Doc No.	**2019R0024167**
Situs Address	**7535 RIDGEVIEW LN**
	PENRYN CA 95663
Acres	**11.30**
Lot Size(SqFt)	**0.00**
Asmt Description	**11.3 AC PAR A MBR 2019R0019536**
Asmt Status	**ACTIVE**

Roll Values

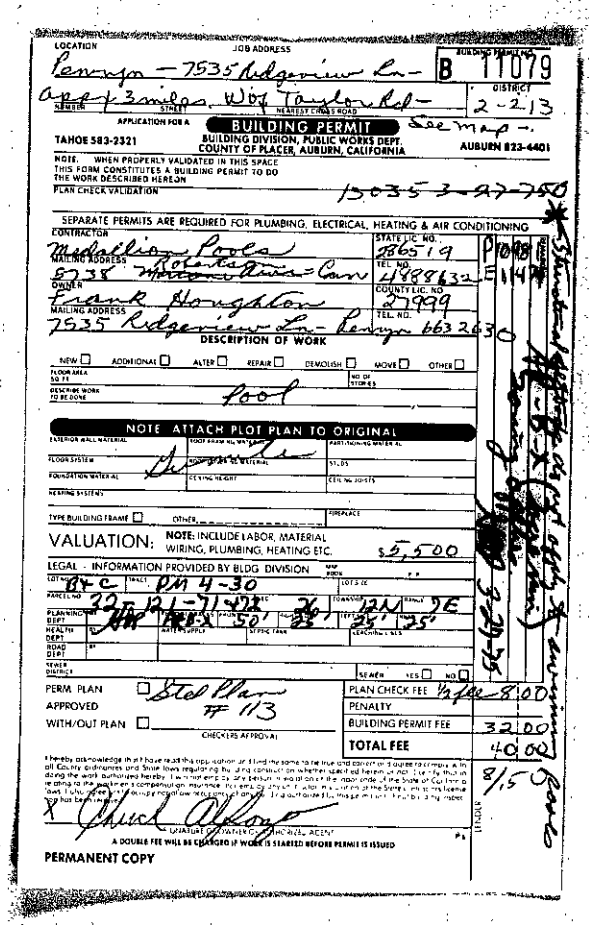
Land	
Structure	
Fixtures	
Growing	
Total Land and Improvements	
Manufactured Home	
Personal Property	
Homeowners Exemption	
Other Exemption	
Net Assessment	

Building Description(s)

Building Seq. Number	**1**
Unit Seq. Number	**0**
Building Code	**1**
Current Doc No.	**2019R0024167**
Number Of Units	**1**
Building Type	
Building Square Footage	**1306**
Garage Square Footage	**0.00**
Unfinished Square Footage	
Year Built	**1973**
Bedrooms	**1**
Full Baths	**1**
Half Baths	**0**
Fireplaces	
Pools	

Navigation

New Search



LOCATION — JOB ADDRESS
Penryn — 7535 Ridgeview Ln — BUILDING PERMIT NO. B 11079
Appx 3 miles W of Taylor Rd — DISTRICT 2-2.13
NUMBER STREET NEAREST CROSS ROAD
APPLICATION FOR A **BUILDING PERMIT** See map.
TAHOE 583-2321 BUILDING DIVISION, PUBLIC WORKS DEPT. COUNTY OF PLACER, AUBURN, CALIFORNIA AUBURN 823-4401
NOTE: WHEN PROPERLY VALIDATED IN THIS SPACE THIS FORM CONSTITUTES A BUILDING PERMIT TO DO THE WORK DESCRIBED HEREON
PLAN CHECK VALIDATION 15035 3-27-750

SEPARATE PERMITS ARE REQUIRED FOR PLUMBING, ELECTRICAL, HEATING & AIR CONDITIONING

CONTRACTOR Medallion Pools — STATE LIC. NO. 386519
MAILING ADDRESS 8738 Monterey Ave Rohnert Park — TEL. NO. 1988632
OWNER Frank Houghton — COUNTY LIC. NO. 27999
MAILING ADDRESS 7535 Ridgeview Ln. Penryn 6632630 — TEL. NO.

DESCRIPTION OF WORK

NEW ☐ ADDITIONAL ☐ ALTER ☐ REPAIR ☐ DEMOLISH ☐ MOVE ☐ OTHER ☐
FLOOR AREA SQ. FT. — NO. OF STORIES
DESCRIBE WORK TO BE DONE: Pool

NOTE ATTACH PLOT PLAN TO ORIGINAL

EXTERIOR WALL MATERIAL — ROOF FRAME MATERIAL — PARTITIONING MATERIAL
FLOOR SYSTEM — ROOF COVER MATERIAL — ST. OS
FOUNDATION MATERIAL — CEILING HEIGHT — CEIL. No. JOISTS
HEATING SYSTEMS
TYPE BUILDING FRAME ☐ OTHER — FIREPLACE

VALUATION: NOTE: INCLUDE LABOR, MATERIAL WIRING, PLUMBING, HEATING ETC. $5,500

LEGAL - INFORMATION PROVIDED BY BLDG. DIVISION — MAP BOOK — P.P.
LOT No. B+C — TRACT PM 4-30 — LOT'S IZE
PARCEL NO 32-121-71-421 — SEC — TOWNSHIP 12N — RANGE 7E
PLANNING DEPT — ZONE RES-X — SQUARE FEET 50 — ACRES — OCCUPANCY — TYPE CONST. — SETBACKS 25' 25'
HEALTH DEPT — WATER SUPPLY — SEPTIC TANK
ROAD DEPT — BY
SEWER DISTRICT — SEWER YES ☐ NO ☐

PERM. PLAN ☐ Std Plan — PLAN CHECK FEE ½ fee 8.00
APPROVED — PENALTY
WITH/OUT PLAN ☐ — CHECK IS APPROVAL — BUILDING PERMIT FEE 32.00
TOTAL FEE 40.00

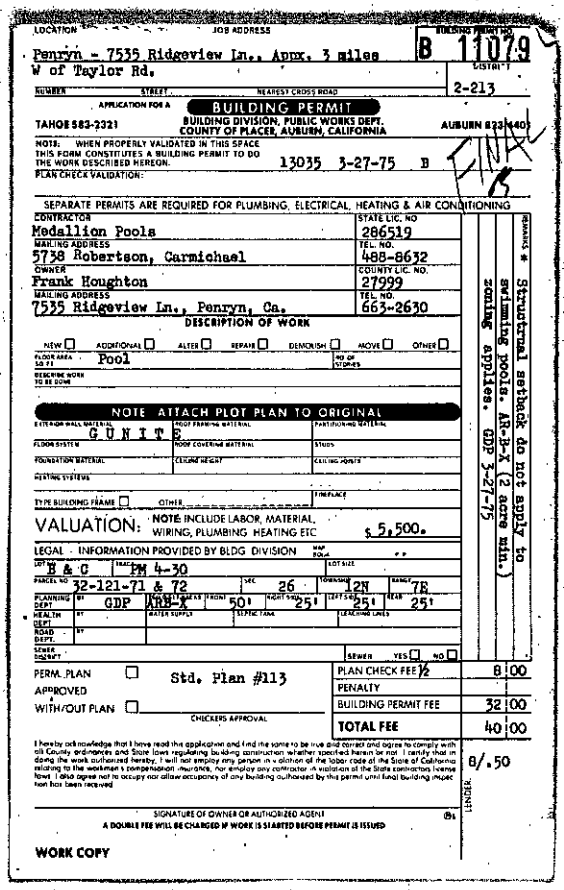
I hereby acknowledge that I have read this application and state that the same is true and correct. I agree to comply with all County ordinances and State laws relating to building construction, whether specified herein or not. I certify that in doing the work authorized hereby, I will not employ any person who is not covered by the State of California Workmen's Compensation Insurance Act. I also certify that I am duly licensed by the State of California and that my license is in full force and effect, or that I am exempt from the provisions of the State's contractor's license law.

X Chuck Alsop — SIGNATURE OF OWNER OR AUTHORIZED AGENT — DATE 8/15

A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED

PERMANENT COPY

Structural approval only. Environmental Health approval required prior to issuance of building permit. Owner to obtain encroachment permit from Public Works for work within County road right-of-way.



LOCATION — JOB ADDRESS — FILING PERMIT NO.

Penryn - 7535 Ridgeview Ln., Aprx. 3 miles W of Taylor Rd. — B 11079 — DISTRICT

NUMBER — STREET — NEAREST CROSS ROAD — 2-213

APPLICATION FOR A **BUILDING PERMIT**

TAHOE 583-2321 — BUILDING DIVISION, PUBLIC WORKS DEPT. COUNTY OF PLACER, AUBURN, CALIFORNIA — AUBURN 823-1403

NOTE: WHEN PROPERLY VALIDATED IN THIS SPACE THIS FORM CONSTITUTES A BUILDING PERMIT TO DO THE WORK DESCRIBED HEREON. 13035 3-27-75 B

FINAL 5

PLAN CHECK VALIDATION:

SEPARATE PERMITS ARE REQUIRED FOR PLUMBING, ELECTRICAL, HEATING & AIR CONDITIONING

CONTRACTOR: Medallion Pools — STATE LIC. NO: 286519
MAILING ADDRESS: 5738 Robertson, Carmichael — TEL. NO: 488-8632
OWNER: Frank Houghton — COUNTY LIC. NO: 27999
MAILING ADDRESS: 7535 Ridgeview Ln., Penryn, Ca. — TEL. NO: 663-2630

DESCRIPTION OF WORK

NEW ☐ ADDITIONAL ☐ ALTER ☐ REPAIR ☐ DEMOLISH ☐ MOVE ☐ OTHER ☐

FLOOR AREA SQ FT: Pool — NO OF STORIES:

DESCRIBE WORK TO BE DONE:

NOTE ATTACH PLOT PLAN TO ORIGINAL

EXTERIOR WALL MATERIAL: GUNITE — ROOF FRAMING MATERIAL — PARTITIONING MATERIAL
FLOOR SYSTEM — ROOF COVERING MATERIAL — STUDS
FOUNDATION MATERIAL — CEILING HEIGHT — CEILING JOISTS
HEATING SYSTEMS — FIREPLACE
TYPE BUILDING FRAME ☐ OTHER

VALUATION: NOTE: INCLUDE LABOR, MATERIAL, WIRING, PLUMBING HEATING ETC $ 5,500.

LEGAL - INFORMATION PROVIDED BY BLDG DIVISION — MAP BOOK — LOT SIZE

LOT W & C — TRACT PM 4-30

PARCEL NO 32-121-71 & 72 — SEC 26 — TOWNSHIP 12N — RANGE 7E

PLANNING DEPT BY GDP — ZONE AR-2 — SETBACKS FRONT 50' — RIGHT SIDE 25' — LEFT SIDE 25' — REAR 25'

HEALTH DEPT BY — WATER SUPPLY — SEPTIC TANK — LEACHING LINES

ROAD DEPT BY

SEWER DISTRICT — SEWER YES ☐ NO ☐

PERM. PLAN ☐ Std. Plan #113

APPROVED

WITH/OUT PLAN ☐ CHECKERS APPROVAL

PLAN CHECK FEE ½	8 00
PENALTY	
BUILDING PERMIT FEE	32 00
TOTAL FEE	40 00

I hereby acknowledge that I have read this application and find the same to be true and correct and agree to comply with all County ordinances and State laws regulating building construction whether specified herein or not. I certify that in doing the work authorized hereby, I will not employ any person in a violation of the labor code of the State of California relating to the workmen's compensation insurance, nor employ any contractor in violation of the State contractors license laws. I also agree not to occupy nor allow occupancy of any building authorized by this permit until final building inspection has been received.

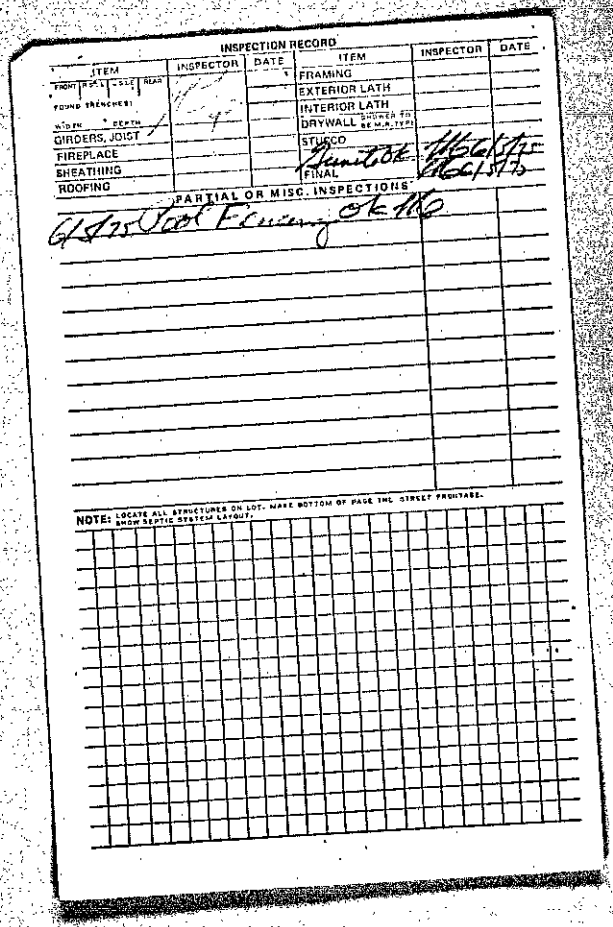
SIGNATURE OF OWNER OR AUTHORIZED AGENT

A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED

WORK COPY

ISSUED 8/.50

REMARKS: * Structural setback do not apply to Swimming Pools. AR-2-X (2 acre min.) Variance applies. GDP 3-27-75



INSPECTION RECORD

ITEM	INSPECTOR	DATE	ITEM	INSPECTOR	DATE
FOOTING: FRONT / REAR / CLOSE / REAR; FOUND TRENCHES; WIDTH / DEPTH			FRAMING		
			EXTERIOR LATH		
			INTERIOR LATH		
			DRYWALL (NAILING TO BE INSPECTED)		
GIRDERS, JOIST			STUCCO		
FIREPLACE			FINAL		
SHEATHING					
ROOFING					

PARTIAL OR MISC. INSPECTIONS

6/25 Roof Framing ok 116

NOTE: LOCATE ALL STRUCTURES ON LOT. MAKE BOTTOM OF PAGE THE STREET FRONTAGE. SHOW SEPTIC SYSTEM LAYOUT.

LOCATION: Kenyon - W/S Cattleman
JOB ADDRESS: 100 Ba... of Sisley Of
NUMBER / NEAREST CROSS ROAD

BUILDING PERMIT NO. B 5354
DISTRICT 2-216

APPLICATION FOR A
PHONES 885-7711
TAHOE 583-2321

BUILDING PERMIT

BUILDING DIVISION, PUBLIC WORKS DEPT.
COUNTY OF PLACER, AUBURN, CALIFORNIA

NOTE: WHEN PROPERLY VALIDATED IN THIS SPACE THIS FORM CONSTITUTES A BUILDING PERMIT TO DO THE WORK DESCRIBED HEREON

Rec #3926 9-27-72 LC

PLAN CHECK VALIDATION

SEPARATE PERMITS ARE REQUIRED FOR PLUMBING, ELECTRICAL, HEATING & AIR CONDITIONING

CONTRACTOR: Owner — STATE LIC. NO.
MAILING ADDRESS — TEL. NO.
OWNER: Frank C. Houghton — COUNTY LIC. NO.
MAILING ADDRESS: 3610 Westview Wy - Sacto — TEL. NO. 489-5895

DESCRIPTION OF WORK

ADD'N [ ] ACCESSORY [ ] ALTER [ ] REPAIR [ ] DEMOLISH [ ] MOVE [ ] OTHER [ ]

FLOOR AREA: 40x24 — NO. OF STORIES: 2
DESCRIBE WORK TO BE DONE: Change of Occupancy

NOTE: PROVIDE PLOT PLAN ON BACK SIDE OF ORIGINAL COPY ONLY

EXTERIOR WALL MATERIAL — WOOD FRAMING MATERIAL — CONDITIONING MATERIAL
FOUNDATION — ROOF COVERING MATERIAL — STORIES
FOUNDATION MATERIAL — CEILING HEIGHT: Existing — CEILING JOISTS
HEATING SYSTEM
ELEC. PLUMBING: FRAME X OTHER — FIRE PLACE

VALUATION: NOTE: INCLUDE LABOR, MATERIAL, WIRING, PLUMBING, HEATING ETC. $ 6,448.00

LEGAL INFORMATION PROVIDED BY BLDG. DIVISION
MAP BOOK — PP
LOT NO. — TRACT — LOT SIZE
PARCEL NO. — SEC. — TOWNSHIP — RANGE

PLANNING DEPT.	BY	HEAD SET BACKS	FRONT	RIGHT SIDE	LEFT SIDE	REAR
HEALTH DEPT.	BY	WATER SUPPLY	SEPTIC TANK		LEACHING LINES	
ROAD DEPT.	BY					

SEWER DISTRICT — SEWER YES [ ] NO [ ]

PERM. PLAN [ ]
APPROVED
WITH/OUT PLAN [ ] — CHECKERS APPROVAL

Sub. to field inspt.

PLAN CHECK FEE	0
PENALTY	
BUILDING PERMIT FEE	35 00
TOTAL FEE	35 00

I hereby acknowledge that I have read this application and find the same to be true and correct and agree to comply with all County ordinances and State laws regulating building construction whether specified herein or not. I certify that in doing the work authorized hereby, I will not employ any person in viola-tion of the labor code of the State of California relating to the workmen's compensation insurance, nor employ any contractor in viplation of the State contractors license laws. I also agree not to occupy nor al-low occupancy of any building authorized by this permit until final building inspection has been received.

Frank C. Houghton
SIGNATURE OF OWNER OR AUTHORIZED AGENT

A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED

PERMANENT COPY

ISSUED: Change of Occupancy Existing 2 Story

UNDER 9/52

LOCATION JOB ADDRESS

Penryn - Mt Carlson Area

West of Sisley 7585 Carlson

NUMBER STREET NEAREST CROSSROAD

APPLICATION FOR (a)

BUILDING PERMIT NO. B 6608

PLUMBING PERMIT NO. P 6763

DISTRICT

PLUMBING PERMIT

PHONES: 885-7711
TAHOE 583-2321

BUILDING DIVISION, PUBLIC WORKS DEPT.
COUNTY OF PLACER, AUBURN, CALIF.

NOTE: WHEN PROPERLY VALIDATED IN THIS SPACE FORM CONSTITUTES A PLUMBING PERMIT TO DO THE WORK DESCRIBED HEREON.

Loan # 6933 22 Aug 73 L.E.H.

CONTRACTOR — STATE LIC. NO

MAILING ADDRESS — TEL. NO.

OWNER — COUNTY LIC. NO.

Frank Houghton

MAILING ADDRESS — TEL. NO.

7585 Carlson - Penryn 663-2630

DESCRIPTION OF WORK: NEW ☐ ADDITION ☐ ALTER ☐ REPLACE ☐ OTHER ☐

REMARKS: Rec'd 2221

FEE COMPUTATIONS

ITEM	QUAN.	ITEMS	QUAN.
BATHTUBS	1	CLOTHES WASHERS	1
SHOWERS &/or PAN		WATER CLOSETS AND OR ANGLE STOP/ANGLE VALVES	1
SUMP PUMP		DRINKING FOUNTAINS	
SINKS KITCHEN, BAR FLOOR, SERVICE	1	URINALS	
LAUNDRY TRAYS		FLOOR DRAINS	
DISH WASHERS		WATER HEATER &/or VENTS	1
GARBAGE DISPOSAL IN EXISTING SINK		GREASE TRAP	
LAVATORIES	1	WATER SOFTENERS	

TOTAL NO. OF ABOVE FIXTURES 6 @ $1.50 ea. 9 TWO

QUAN.	ITEMS	RATE	FEE	
	BUILDING SEWER ETC.	15.00		
	FOR REPAIR OR SERVICE	3.00		
	PRIVATE SEWER	10.00		
	GAS SYSTEM ($1.50 5 OUTLETS $1.50) ($.50 IN OUTLETS 5 OR ES)	←		
	SWIMMING POOL PIPING	5.00		
	WATER PIPING	1.50	1	50
	MISCELLANEOUS			

I hereby acknowledge that I have read this application and find the same to be true and correct and agree to comply with all County ordinances and State laws regulating building construction whether specified herein or not. I certify that in doing the work authorized hereby, I will not employ any person in violation of the labor code of the State of California relating to the workmen's compensation insurance, nor employ any contractor in violation of the State contractors license laws.

SUB TOTAL	10	50
PERMIT FEE	2	00
PENALTY		
TOTAL FEE	12	50

Frank A Houghton

SIGNATURE OF CONTRACTOR OR AUTHORIZED AGENT

A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED

PERMANENT COPY

INSPECTION RECORD

ITEM #	INSPECTOR	DATE	PARTIAL OR MISC. INSPECTION	INSPECTOR	DATE
SEPTIC TANK	[illegible]	7-10-73			
ROUGH GAS & PLUMBING		12-7-73			
SEWAGE PIT LEACH FIELD					
FINAL GAS					
FINAL PLUMBING		1-5-74			

PRIVATE SEWAGE SYSTEM

WATER SUPPLY | SEPTIC TANK SIZE IN GAL. | LEACH FIELD IN SQ. FT.

UNSUCCESSFUL TRIPS NOTES ETC.

NOTE: PLOT PLAN SHOW SEPTIC SYSTEM LAYOUT, LOCATE P.U. WELLS, STREAMS, POND, DRAIN DITCHES ETC.

JOB ADDRESS: Penryn - 4/5 Callison Rd

JOB ADDRESS: App 1/4 mi w/of Sunset

BUILDING PERMIT NO. B 8065

2-212

APPLICATION FOR A

BUILDING PERMIT

PHONES 885-7711
TAHOE 583-2321

BUILDING DIVISION, PUBLIC WORKS DEPT.
COUNTY OF PLACER, AUBURN, CALIFORNIA

NOTE: WHEN PROPERLY VALIDATED IN THIS SPACE THIS FORM CONSTITUTES A BUILDING PERMIT TO DO THE WORK DESCRIBED HEREON

9779 7-5-74B

PLAN CHECK VALIDATION

9687 6-27-74-B

SEPARATE PERMITS ARE REQUIRED FOR PLUMBING, ELECTRICAL, HEATING & AIR CONDITIONING

CONTRACTOR: Owner — STATE LIC. NO.

MAILING ADDRESS — TEL. NO.

OWNER: Richard Bawley — COUNTY TAX NO.

MAILING ADDRESS: 7515 Callison Rd Penryn 663-2514 — TEL. NO.

DESCRIPTION OF WORK

Complete Dwelling & Attached Garage

X NEW ☐ ADDITION ☐ ALTER ☐ REMOVE ☐ MOVE ☐ CONVERT

2048 # DLG — NO. OF STORIES: 1
624 # Gar
224 # Por

NOTE: PROVIDE PLOT PLAN ON BACK SIDE OF ORIGINAL COPY ONLY

ext ply sht clng — 2x6 16" OC Comp — shkr 2x4 16" OC, 2x6 #248

FOUNDATION: 82 F/A — FIREPLACE: yes

OTHER: X

VALUATION: NOTE: INCLUDE LABOR, MATERIAL, WIRING, PLUMBING, HEATING ETC. $ 27982

LEGAL INFORMATION PROVIDED BY BLDG. DIVISION — MAP BOOK — PAGE — LOT SIZE

EARTH WORK 12-121-70 — SEC. — TOWNSHIP — RANGE

PLANNING DEPT. Dun* — FRONT 50' — RIGHT SIDE 25' — LEFT SIDE 25' — REAR 25'

HEALTH DEPT. S.R. — WATER SUPPLY Cist — SEPTIC TANK 750 gal — LEACHING LINES Exist

ROAD DEPT. Sue — Cty Builders

FIRE & SCHOOL DISTRICT — SEWER YES ☐ NO ☐

PERM. PLAN ☐
APPROVED
WITH/OUT PLAN ☐ _____ CHECKERS APPROVAL

PLAN CHECK FEE	48 25
PENALTY	
BUILDING PERMIT FEE	96 50
TOTAL FEE	144 75

8
1.76

I hereby acknowledge that I have read this application and find the same to be true and correct and agree to comply with all County ordinances and State laws regulating building construction whether specified herein or not. I certify that in doing the work authorized hereby I will not employ any person(s) not subject to the labor code of the State of California relating to the workmen's compensation insurance and that this contractor is in violation of the State contractor's license laws. I also agree not to occupy any part of the premises of any building authorized by this permit until final building inspection has been approved.

Richard A. Bawley
SIGNATURE OF OWNER OR AUTHORIZED AGENT

A DOUBLE FEE WILL BE CHARGED IF WORK IS STARTED BEFORE PERMIT IS ISSUED

PERMITTEE'S COPY — Cupp Homes

27982 40 — 145.96

B866

COUNTY OF PLACER
DEPARTMENT APPROVALS - NEW CONSTRUCTION
PUBLIC WORKS - HEALTH - PLANNING

DATE 6/26/74

Location of property: Penryn N/S Callison Rd. App 1/4 mi W/o Lisbon
Owner: Richard Bowler | Mailing address: 7585 Callison Rd. Penryn | Tel No. 663-2574
Name of builder: owner
Describe work to be done: D & G.
Mobile Home | Temp. | Perm.

Sq. ft. of house	No. of stories	No. of bedrooms	Parcel No.	Subdivision	Section	Township	Range
8½4	1	4	32-121-70				

Sewage district, or name of district | If private system, size of septic tank: septic 1200 gal existing | Type of tank, concrete or metal
Square feet of leach line: 1320 Sq ft existing | If seepage pits, number of pits | Depth of pits | Diameter of pits
If absorption bed, width of bed | Length of bed | Square feet of bed | Other proposed system
Residential use | Commercial use | Existing buildings on property | TOPOGRAPHY: Level Sloping
DISTANCE OF SEWAGE SYSTEM FROM: Wells | Drainage | Creek | Spring | Front property line | Side property line
Rear property line | Percolation test results | Performed by | Date | Remarks: No addition to sewage disposal system at this time. See permit Bowler-1972 do not put driveway over leach lines.

WATER SUPPLY MUST MEET COUNTY STANDARDS

WATER SUPPLY: Well X existing | Ditch | Name of community system | Other
Pump number | Size of holding tank | Size and type of filter | Size and type of pump | Installed by:
Log of water system must be attached. | REMARKS:

I HEREBY CERTIFY THAT THE PROPOSED DISPOSAL SYSTEM AND WATER SYSTEM WILL BE INSTALLED ACCORDING TO THE ABOVE SPECIFICATIONS AND AS PROVIDED BY THE REGULATIONS OF THE PLACER COUNTY HEALTH DEPARTMENT AND/OR STATE LAW.

NOTE: THE BUILDING DEPARTMENT WILL INSPECT SEWAGE AND WATER SYSTEM FOR COMPLIANCE WITH CODES AND PLANS

Richard A. Bowler — SIGNED (owner or contractor) — 6/26/74 Date

APPROVED BY THE HEALTH DEPARTMENT: Steve Kubo — SANITARIAN — Date

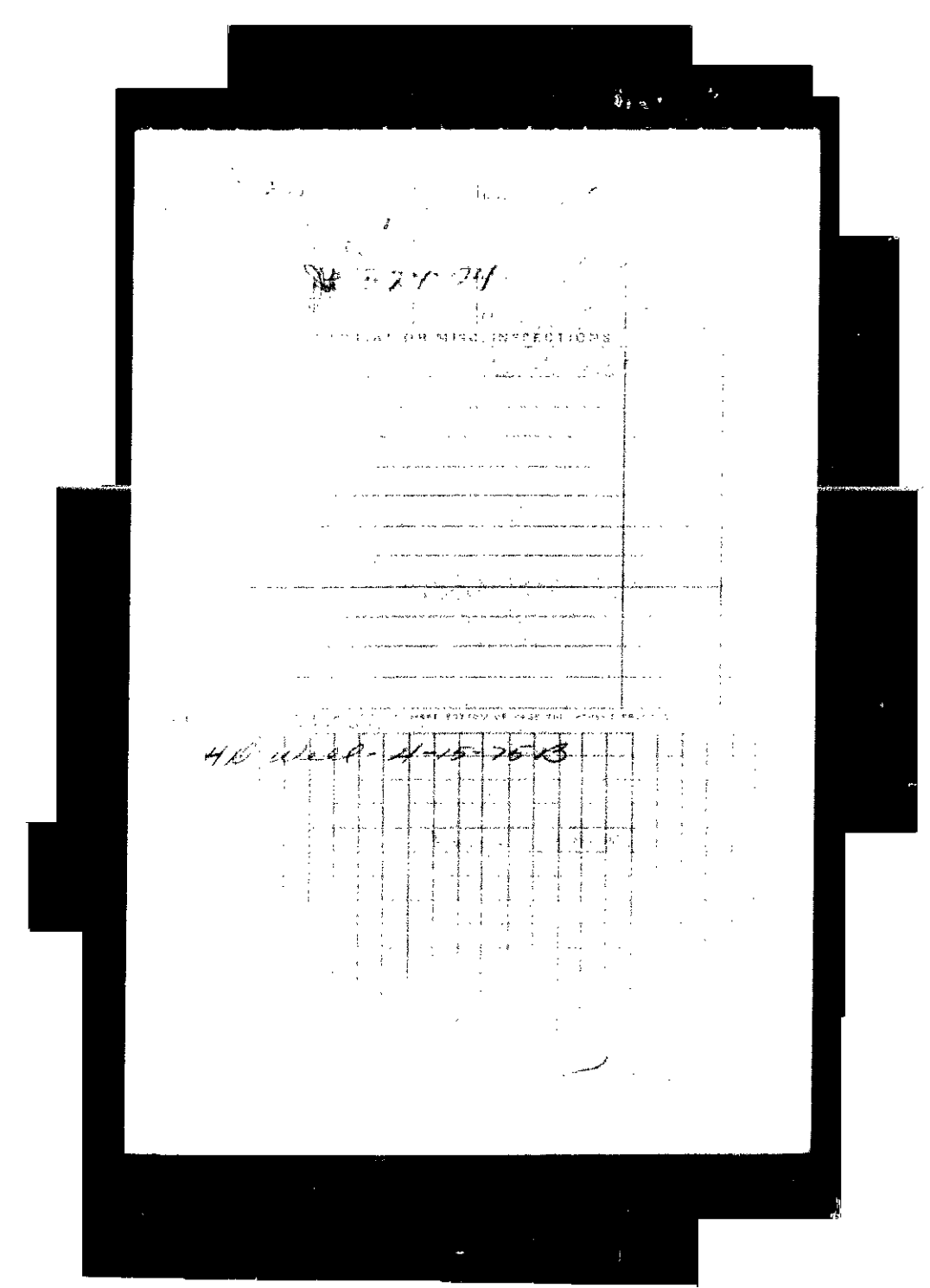
APPROVED BY THE PLANNING DEPARTMENT: WM — PLANNER | ARA Secure — ZONE | 50' — FRONT SETBACKS | 25' — SIDE | 25' — REAR | 6-26-74 Date

APPROVED BY THE PUBLIC WORKS DEPARTMENT: Mac Ley B Gilmore — SIGNED (title) — 6-26-74 Date

Capp Homes
NAME, BRANCH DESIGNATION, AND ADDRESS OF CONSTRUCTION LENDER

REMARKS: * Mobile Home to be removed when house is completed

WHITE Building Department CANARY Health PINK Public Works GOLDENROD Planning



AUBURN OFFICE (530) 745-3010 | **PLACER COUNTY BUILDING DEPARTMENT** | TAHOE OFFICE (530) 581-6200

BUILDING PERMIT

Permit Number
BLD17-03846 **APN: 031-220-061-000** **7615 Callison RD, Penryn, CA 95663**

30 8 AC SEC 23 12 7 Inspection Number (PID) 1703846

Issue Date	09/05/2017
Expire Date	9/5/2019
Issued By	Michelle Paris
Status	Issued

Owner	MIMA CAPITAL LLC	4120 DOUGLAS BLVD 306-175 GRANITE BAY CA,	916-813-9920
Contractor	BUILDING ENGINEERING AND MANAGEMI	4780 ROCKLIN ROAD ROCKLIN, CA 95677	9163158877
Architect			
Engineer			

DESCRIPTION OF WORK
ESTABLISH 100 AMP POWER (MAX) TO THE WATER WELL ON SITE
TRENCHING APPROX 300 FT FROM MAIN POWER TO EXISTING WATER WELL

PROJECT QUANTITY AND VALUE

Description	Area (SqFt)	Value ($)
N/A		
CONTRACT PRICE	0	$400 00
Total Valuation		$400 00

FEES PAID: $141.18

PERMIT NOT VALID UNLESS SIGNED

I certify that I have read this permit and state that the above information is correct I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above mentioned property for inspection purposes I also agree to save, indemnify and hold harmless the County of Placer against all liabilities, judgment, costs and expenses which may in any way accrue against said county in consequence of granting this permit

Date 9/5/17 Signature of applicant/agent

COUNTY OF Placer

BUILDING SERVICES

PERMIT APPLICATION FORM

Permit# 17-03846 (Office Use Only)

Submit applications to:
Auburn Office – 3091 County Center Drive Suite 100 Auburn, CA 95603
Tahoe Office – 775 North Lake Blvd Tahoe City, CA 96145

Only property owners, licensed contractors or agents with written authorization may obtain permits

(Please mark all that apply) [X] RESIDENTIAL [ ] COMMERCIAL [X] AGRICULTURAL* Items marked with an (*) may need a grading permit

[ ] New Structure *	[ ] Addition *	[X] Tenant Improvement	[ ] Plumbing	[ ] Solar (Roof or Ground)
[ ] Second Residence *	[ ] Remodel	[ ] Ag Building *	[X] Electrical	[ ] Swimming Pool
[ ] Mobile Home *	[ ] Fire Repair	[ ] Winery/Wine Tasting *	[X] Mechanical	[ ] Deck/Patio Cover
[ ] Modular/MFG Unit *	[ ] Garage/Storage *		[ ] Reroof	[ ] Termite Repair
[ ] Guest House *	[ ] Demolition		[ ] Window change	[ ] Other

Project Address: ~~8080~~ 7615 Callison rd Lincoln Penryn Ca **APN#:** 031-220-061-008

Nearest Cross Street or Intersection Taylor rd. **Total Contract Price** $400.00

COMPLETE SCOPE OF WORK: INSTALL STAND ALONE ELECTRICAL METER MAIN PANEL ON EMPTY LOT. 100 AMPS for water well only ✓

[X] Residential New [ ] Addition [ ] Remodel [ ] Rebuild		[ ] Commercial New [ ] Tenant Improvement [ ] Addition	
Proposed Sq. Ft. of work area		**Proposed Sq. Ft. of work area**	
[ ] Living Area	____ sf	[ ] Office	____ sf
[ ] Garage/Storage	____ sf	[ ] Medical	____ sf
[ ] Deck	____ sf	[ ] Retail	____ sf
[ ] Porch	____ sf	[ ] Restaurant	____ sf
[ ] Carport	____ sf	[ ] Warehouse	____ sf
[ ] Remodel	____ sf	[ ] Other	____ sf
[ ] Other	____ sf		
Explain NA		Explain	

Mina Cash Capital

Applicant Information: **Please check the appropriate box for the primary contact**

[ ] AGENT [X] ~~OWNER/BUILDER~~? [ ] PROPERTY OWNER [ ] ENGINEER
[X] CONTRACTOR *Proof of Ownership may be required* [ ] ARCHITECT/DESIGNER

If you would like to be notified with inspection information, please provide your email address:

Property Owner Name Mike Fournier Mina Capital LLC Telephone 916-813-9920 Email

Address 4120 Douglas Blvd # 306-175 City/State/Zip Granite Bay CA 95746

Agent Name Victor MCCarthy Telephone Email

Address City/State/Zip

Contractor Name V. ctor M'Carthy Telephone Bem Inc. Email VICM@BEM.COM

Address 4780 Rocklin rd. City/State/Zip Rocklin Ca. License # and Class 1014773 B

Architect/Designer Name Telephone Email

Address City/State/Zip License/Registration #

Engineer Name. Telephone Email

Address City/State/Zip License/Registration #

$141.18

OWNER BUILDER DECLARATION

I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT I AM EXEMPT FROM THE Contractors' State License Law for the reason(s) indicated below by the checkmark(s) I have placed next to the applicable item(s) (Section 7031 5, Business and Professions Code Any City or County that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9, commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt from licensure and the basis for the alleged exemption Any violation of Section 7031 5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500)

☐ I, as owner of the property, or my employees with wages as their sole compensation will do ☐ all of or ☐ portions of the work, and the structure is not intended or offered for sale (Section 7044, business and Professions Code The Contractors' State License Law does not apply to an owner of the property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale)

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Section 7044, Business and Professions Code The Contractors' License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project with a licensed contractor pursuant to the Contractors' State License Law)

☐ I am exempt from licensure under the Contractors' State License Law for the following reason

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website http //www leginfo ca gov/calaw html

Property Owner/Authorized Agent Signature Date

LICENSED CONTRACTOR DECLARATION

I hereby affirm that under penalty of perjury I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business & Professions Code License Class and License # will be verified by CSLB

Contractor's Signature 9/1/17 Date

WORKERS' COMPENSATION DECLARATION

WARNING FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES

I hereby affirm under penalty of perjury one of the following declarations

☐ I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued

☒ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued

☐ I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to be come subject to the workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions

DECLARATION REGARDING CONSTRUCTION LENDING AGENCY
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code)

Construction Lender's Name and Address

By my signature below, I certify to each of the following I am ☑ a California Licensed Contractor or ☐ authorized to act on the Contractor's behalf** or ☐ the property owner* or ☐ authorized to act on the property owner's behalf**

- I have read this construction permit and the information I have provided is correct I agree to comply with all applicable City or County ordinances and state laws relating to building construction I authorize representatives of this City or County to enter the above-identified property for inspection purposes
- I understand this application does not guarantee project approval

TIME LIMITATIONS OF APPLICATION AND PERMIT An application for permit for any proposed work shall be deemed to have been abandoned 1 year after the date of filing, unless a permit has been issued The destruction of documents may occur 180 days after application expiration date An issued permit will expire 2 years from date of issue You will NOT be notified prior to the expiration of your permit If you allow the permit to expire prior to completion of the project, a new permit will be required and you may become liable for additional fees including but not limited to administrative fees, inspection fees, and impact fees Building construction plans that were submitted may also be destroyed upon permit expiration, subject to new building construction codes

Signature California Licensed Contractor, Property Owner* or Authorized Agent** Date 9/1/17

*Requires separate verification form **Requires separate authorization form

COUNTY OF Placer

PLACER COUNTY - BUILDING INSPECTION

FINAL INSPECTION VERIFICATION

Permit #	**BLD17-03846**	**Historic Permit #**	
APN	**031-220-061-000**		
Address	**7615 Callison RD, Penryn**		

504 Ag Electrical Service	**Final Pass**	**02/14/2018**	Rwarren
602 Final-Electrical	Pass	02/14/2018	Rwarren
111 Ground Electric	Pass	02/08/2018	Rwarren
503 Electrical Service	Pass	02/08/2018	Rwarren
528 Water Service	Pass	02/08/2018	Rwarren
533 Well Conduit	Pass	02/08/2018	Rwarren
602 Final-Electrical	Fail	02/08/2018	Rwarren
503 Electrical Service	Cancelled	01/16/2018	Rwarren
503 Electrical Service	Fail	12/28/2017	Rkestene

PLACER COUNTY CDRA
FINALED
FEB 14 2018
By:
BUILDING SERVICE DIVISION

BUILDING PERMIT

3449 — 3.57

AUBURN
219 Maple Street
TU 5-8573

DEPARTMENT OF PUBLIC WORKS, COUNTY OF PLACER
BUILDING INSPECTION DIVISION
AUBURN, CALIFORNIA

TAHOE CITY
P.O. Box 84
JU 3-3950

DISTRICT 2

PERMISSION TO BUILD, OCCUPY, AND USE, ONLY AS SPECIFIED BELOW, IS HEREBY GRANTED

TO [illegible] — MAILING ADDRESS Box 625- Lincoln — PHONE NO. — DATE 11-29-57

FORMER OWNER OF LAND — CONTRACTOR OR OWNER BUILT Owner

PARCEL NO.

LOCATION OF JOB North side Gallison Rd - Taylor Rd // — JOB STREET ADDRESS /// appx 500yds- East

LOT	BLOCK	SUBDIVISION	SECTION	TOWNSHIP	RANGE
			23	12	7

BLDGS.	USE	ROOMS	STORIES	CONSTR.		FLOOR AREA SQ. FT.
Kitchen Addition & Porch		1	1	Fr	Porch 70sf	224

TUBS	SHOWERS	TOILETS	LAVATORIES	SINKS	DRYER	WASHER OR LAUNDRY TRAYS	DISHWASHER	SEWAGE DISPOSAL	LEACHLINE	WATER
				1						

RANGE	HEATING	WATER HEATER
E		

SIZE OF LOT 54 Acres	HEALTH DEPT. APPROVAL	VALUE	2,345.00
OTHER BLDGS. ON LOT	ROAD DEPT. APPROVAL	PERMIT FEE	12.00
ZONE / OCCUPANCY TYPE	PLANNING COMM. APPROVAL	PLAN CHK FEE	
SETBACK STREET 20'	THIS CONSTRUCTION AUTHORIZED AND PERMIT ISSUED BY	ELECT. FEE	4.50
SETBACK SIDELINE Acreage	J. R. BELL, CHIEF INSPECTOR	PLUMBING FEE	6.50
SETBACK REAR P.L. Acreage	BY Edna Nations CLERK	PENALTY	
		TOTAL FEES	23.00

REMARKS

7425-

NUMBER FILE

BUILDING DEPARTMENT
County of Placer

219 Maple Street, Auburn, Calif. — County Administrative Center, Tahoe City, Calif. P. O. 84

FOR OFFICE USE
Permit No. 5207
District 4-2
Date 4-30-45

APPLICATION FOR BUILDING PERMIT

(Permit will not be issued unless application is completed in detail.)

(Please Print)
Owner of Project Eugene A Page Address Box 625 - Lincoln
Former Owner of Land Myrtle Page Address Box 625 - Lincoln
Contractor or Builder owner Address
County Business License No. Workmen Insured Yes ☐, No ☐
LOCATION of job is on the (North X, South, East, West,) side of Gallison Rd.
(Name of street, road, private road, etc.)
Nearest crossroad is Taylor Rd. - 500 yds.
(Name and indicate distance to the above road)

DESCRIPTION FROM DEED: Lot, Block, Subdivision
Section 23 Township 12 North, Range 7 East.
Parcel No. General Area Newcastle.

DESCRIPTION OF WORK: (Mark in number of buildings).
New building Additions ✓ Alterations Repairs Moving
Proposed use of each unit, square feet and number of rooms Kitchen addition - porch - 76 ft Square footage 224

CONSTRUCTION: (Main project) Frame ☑, Stucco ☐, Block ☐, Brick ☐, Other
Stories one Wall finish outside siding Foundation concrete Subfloor wood
Floor joists and spacing 2x6 - 16 oc Studs 2x4 - 16 oc Ceiling height 8 ft.
Inside walls sheet rock Ceiling joists 2x6 - 16 oc
Roof asb. Rafters 2x4 - 24 oc Pitch 4 12 Fireplace
No. Plmb. Fixtures: Tubs Showers Toilets Lavatories Sinks 1 Laundry Trays
Kitchen range electric Heating Water Heater Sewer Meter Amps 100
(Appliances gas or electric?)
Size of septic tank in gals Leaching lines Domestic water supply
Size of lot 5 acres Other buildings on lot shop, garage, barn Zone
Set back from street front 20', Set back side lines acc., Set back rear acc.

State total current valuation of each building, including all plumbing, septic tanks, cement walks, heating units, pressure systems built into the structures and all other equipment that has become a permanent part of the buildings. The valuation should include the owner's labor and any material he may have had on hand.

Valuation $ 345.00 Fee $ 12.00 Elec. Fee $ 1.50 Plmb. Fee $ 6.50 Plan Check $
Receipt# 7465 Total Fee $ 20.00

I certify that the above statements are correct and that I will comply with the provisions of the Building Code referred to by County Ordinances as amended, all zone requirements, and other State and County Ordinances or Laws pertaining to the above.

Inspector's Signature R H York Signed Eugene Page

THIS CERTIFICATION IS REQUIRED BY LAWS OF THE STATE OF CALIFORNIA

COUNTY OF PLACER

Division of Building Inspection

I hereby certify that I am licensed under the provisions of Chapter 9, Division 3, of the State of California Business and Professions Code in the Classification _____ License No._____ and further certify that the aforesaid license is in full force and effect.

Date:_____ Signed:_____

Address_____

I hereby certify that I am exempt from the Contractors License Laws of the State of California under Section 7031.5 because of one or more of the following conditions:

1. ✓ I am the owner of the property and the structure is being built for the occupancy of the owner and will not be offered for sale within the year. (Sec. 7044)

2. _____ The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)

3. _____ As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)

4. _____ Aggregate total of the contracts is not more than $100.00 for labor, material and all other items of work. (Sec. 7048)

5. _____ I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)

6. _____ I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)

7. _____ I am an employee with wages as my sole compensation. (Sec. 7053)

8. _____ The property is in the ownership of the Federal Government. (Sec. 7047)

Date: 11-26-65 Signed: Genevieve Page
(owner)

Signed:_____
(agent for Owner)

Owners Address_____

_____

Phone:_____

Permit issued by this
Certification No._____

By _____

COUNTY OF PLACER

DEPARTMENT OF PUBLIC WORKS
Division of Building Inspection

APPLICATION FOR ELECTRICAL PERMIT

Date 11-24- 1965 Permit No. 5707

The undersigned hereby makes application to the County of Placer for a permit to install electrical fixtures and/or wiring as listed on the reverse side hereof, and agrees to install said fixtures and/or wiring in accordance with the provisions of all local Ordinances and all other laws applicable thereto.

USIE OF PREMISES

CONTRACTOR

OWNER Eugene N. Poe

JOB ADDRESS N. Gallison Rd.

SIGNED Eugene N. Poe

	NO.	EACH	FEES
FOR PERMIT			1.00
Temporary Pole		1.00	
Meter New meter		1.00	1.00
Outlets	4	1.00	1.00
Range/Dryer/Water Heater	2	.75	1.50
Elec. Heater (Per KW)			
1 KW Per 100		.25	
Motor (to 1 HP)		.50	
Motor (1 to 5 HP)		1.00	
Motor (5 to 20 HP)		1.50	
Motor (over 20 HP)		3.00	
		TOTAL FEES	4.50

County of Placer

DEPARTMENT OF PUBLIC WORKS
Division of Building Inspection

APPLICATION FOR PLUMBING AND GAS PERMIT

Date 11-26 1965 Permit No. 5907

The undersigned hereby makes application to the County of Placer for a permit to install plumbing fixtures and/or pipes; gas appliances and/or pipes listed on the reverse side hereof, and agrees to install said fixtures, appliances and/or pipes in accordance with the provisions of all local Ordinances and all other laws applicable thereto.

OWNER Eugene P. Page
PLEASE PRINT

JOB ADDRESS N. Gibson Rd.

USE OF PREMISES Res. addition

Eugene Page Loomis-Lincoln 663-3684
SIGNED ADDRESS PHONE NO.

Plumbing	Gas Piping & Appliances	Total Fee
		6.50

Item	No.	Ea.	Fee
For issuing each permit	✓	$2.00	2.00
In addition —			
For each plumbing fixture or trap or set of fixtures on one trap (including water, drainage, piping and backflow protection therefor)	2	1.50	3.00
For each building sewer and each trailer park sewer		2.50	
Rainwater systems - per drain		2.00	
For each cesspool		5.00	
For each private sewage disposal system		3.00	
For each water heater and/or vent		1.50	
For each gas piping system of one (1) to five (5) outlets		1.50	
For each gas piping system of six (6) or more, per outlet		.30	
For each industrial waste pre-treatment interceptor, including its trap and vent, excepting kitchen type grease interceptors functioning as fixture traps		1.00	
For installation, alteration or repair of water piping and/or water treating equipment	✓	1.50	1.50
For repair or alteration of drainage or vent piping		1.50	
For each lawn sprinkler system or any one meter including backflow protection devices therefor		2.00	
For vacuum breakers or backflow protective devices on tanks, vats, etc., or for installation on unprotected plumbing fixtures including necessary water piping - one (1) to five (5)		2.00	
Over five (5) each		.30	

4 6.50

BUILDING PERMIT

3945 3907

AUBURN
219 Maple Street
TU 5-8573, 885-4573

DEPARTMENT OF PUBLIC WORKS, COUNTY OF PLACER
BUILDING INSPECTION DIVISION
AUBURN, CALIFORNIA

TAHOE CITY
P.O. Box 84
JU 3-3950

DISTRICT # 2
Newcastle

PERMISSION TO BUILD, OCCUPY, AND USE, ONLY AS SPECIFIED BELOW, IS HEREBY GRANTED

TO Eugene A. Lago

MAILING ADDRESS Box 625- Lincoln

PHONE NO.
DATE 11-29-65

FORMER OWNER OF LAND

CONTRACTOR OR OWNER BUILT Owner

PARCEL NO.

LOCATION OF JOB North side Callison Rd - Taylor Rd

JOB STREET ADDRESS 1000 ft west Taylor Rd. approx 500 yds. East

Lot lies to W of from Taylor Rd straight chain way back and around Tuma across SP tracks.

LOT | BLOCK | SUBDIVISION | SECTION 23 | TOWNSHIP 12 | RANGE 7

West side of Callison

BLDGS.	USE	ROOMS	STORIES	CONSTR.		FLOOR AREA SQ. FT.
Kitchen Addition & Porch		1	1	Fr	Porch 70sf	224

TUBS	SHOWERS	TOILETS	LAVATORIES	SINKS	DRYER	WASHER OR LAUNDRY TRAYS	DISHWASHER	SEWAGE DISPOSAL	LEACHLINE	WATER
				1						

RANGE | HEATING | WATER HEATER

SIZE OF LOT 5± Acres	HEALTH DEPT. APPROVAL	VALUE	2,345.00
OTHER BLDGS. ON LOT	ROAD DEPT. APPROVAL	PERMIT FEE	12.00
ZONE / OCCUPANCY TYPE	PLANNING COMM. APPROVAL	PLAN CHK FEE	
SETBACK STREET 20'	THIS CONSTRUCTION AUTHORIZED AND PERMIT ISSUED BY	ELECT. FEE	4.50
SETBACK SIDELINES Acreage	J. R. BELL, CHIEF INSPECTOR	PLUMBING FEE	6.50
SETBACK REAR P.L. Acreage	BY [signature] CLERK	PENALTY	
		TOTAL FEES	23.00

REMARKS

INSPECTION COPY

INSPECTIONS

DATE	STRUCTURAL	
	SETBACK	
	FOUNDATION	J.T.
12-21-66	GIRDERS	J.T.
12-21-66	FRAME & LATH	J.T.
	FIRE PLACE	
	SHEET ROCK	
	STUCCO	
	ROOFING	
1-20-67	FINAL	J.T.
	OTHER APPROVALS	

DATE	ELECTRICAL	
	POWER POLE	
10-21-66	ROUGH	J.T.
	UNDERGROUND	
	METER HOOK-UP	
	FINAL	

DATE	PLUMBING	
12-21-66	GROUND	J.T.
10-21-66	TOP OUT	J.T.
	GAS TEST	
	METER HOOK-UP	
	FINAL	

DATE	HEATING	
	DUCTS	
	FLUES	
	FURNACE	
	FINAL	

NOTES: 1-20-67 no one home but looks all completed on this addition J.T.

BUILDING PERMIT

Permit Number
BLD17-01300 **APN: 031-220-062-000** **8085 CALLISON RD, PENRYN, CA 95663**

22.85 AC SEC 23 12 7 Inspection Number (PID): 1701300

Issue Date: 04/13/2017
Expire Date: 4/13/2019
Issued By: Michelle Paris
Status: Issued

Owner:	SKAIFE SHAWN & SKAIFE JANE LE	8085 CALLISON RD PENRYN CA, 95663	5304009792
Contractor:	KINGDOM HEATING & AIR INC	P O BOX 2108 RANCHO CORDOVA, CA 95741	9169976362
Architect:			
Engineer			

DESCRIPTION OF WORK

RESIDENTIAL RE ROOF
PANEL CHANGE / UPGRADE TO 200 AMP
CUT IN NEW ROOF MT HEAT PUMP ALL NEW DUCT WORK

- 2013 CBC CODE
- CBC 7A ROOF COVERINGS, VALLEY & GUTTER PROTECTION REQUIRED
- REROOF PERMIT FOR: DWELLING ONLY
-TEAR OFF 1 LAYER COMP SHINGLES AND INSTALL COMP SHINGLES
- MINIMUM CLASS A ROOFING ASSEMBLY REQUIRED
- THE ROOF COVERING INSTALLED ON THE STRUCTURE IDENTIFIED ABOVE MUST BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS FOR INSTALLATION.
SRA MODERATE

HVAC
FORMS CF-2R AND CF-3R ARE REQUIRED AT FINAL INSPECTION

PROJECT QUANTITY AND VALUE

Description:
N/A

FEES PAID: **$406.77**

	Area (SqFt)	Value ($)
CONTRACT PRICE	0	$24,050.00
Total Valuation:		$24,050.00

PERMIT NOT VALID UNLESS SIGNED

I certify that I have read this permit and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above mentioned property for inspection purposes. I also agree to save, indemnify and hold harmless the County of Placer against all liabilities, judgment, costs and expenses which may in any way accrue against said county in consequence of granting this permit:

Date: 4/13/17 Signature of applicant/agent: _____

BUILDING PERMIT INSPECTION CARD

BLD17-01300 **APN: 031-220-062-000** **8085 CALLISON RD, PENRYN, CA 95663**

PLEASE READ ALL INFORMATION IN THIS DOCUMENT

To schedule an inspection you will need to use the Building Inspection website at: https://permits.placer.ca.gov/CitizenAccess/ or the Inspection Request Phone System (IVR) at, call (530) 745-3020 for our Auburn Office or (530) 581-6205 for our Tahoe Office and follow the simple instructions. Inspection scheduling is available 24 hours a day, 7 days a week. All inspections must be scheduled at least on day in advance. To use the IVR you will need: A touch tone phone, your permit specific PID number, and the inspection code related to your project.

Stay on the phone until you have received your confirmation number for your inspection.

NOTICE AND WARNING!!!: This permit will expire on the date indicated on the affixed permit. To avoid additional fees and/or interruption of your project, your permit must be extended or renewed prior to the expiration date. All extension requests should be made in writing. Applications for permit extensions are available upon request. Do not cover any work until it has been inspected and approved. This field inspection report must be posted in a highly visible location. The job address must be clearly posted and visible from the street and/or on the front of the building. This field inspection report must be available for each inspection or the inspection will not be made. Inspections may be scheduled via internet or by phone 24 hours a day. Visit the daily inspection sequence list at: http://www.placer.ca.gov/departments/communitydevelopment/building/inspection-info. Permit fees are set to provide for a limited number of inspections. A re-inspection fee will be charged when a return trip is necessary due to, but not limited to the following; 1) Work is not completely ready for the called inspection. 2) Deficiencies found on the previous inspection not corrected, or new deficiencies were created. 3) Lack of access to the work to be inspected. 4) The previous correction notices, or this field inspection report are not on the job site. 5) Job address is not posted visibly from the street at the job site.

INSPECTION RECORD - REROOF		
INSP CODE	ITEM	INSP / DATE
432	REROOF - PRE DECK	
401	ROOF BUILD UP / ROUGH FRAME	
428	ICE DAM	
433	REROOF - FINAL	

Please retain for your records.

PERMIT APPLICATION FORM

Only property owners, licensed contractors or agents with written authorization may obtain permits.

Placer

Permit # 17-01300 (Office Use Only)

☑ RESIDENTIAL ☐ COMMERCIAL ☐ AGRICULTURAL

(Please mark all that apply)

☐ New Structure	☐ Second Residence	☐ Mobile Home	☐ Modular/MFG Unit	☐ Addition	☐ Remodel
☐ Fire Repair	☐ Demolition	☐ Termite Repair	☐ Ag Building	☐ Swimming Pool	☐ Deck/Patio Cover
☐ Garage/Storage	☐ Tenant Improvement	☐ Plumbing	☑ Electrical	☑ Mechanical	☐ Winery/Wine Tasting
☐ Window change	☑ Reroof	☐ Solar	☐ Other:		

Project Address: 8085 Callison Rd, Penryn, CA 95663 APN: 031-220-062-000

Neorest Cross Street or Intersection: Taylor Rd. and Sisley Rd. Total Contract Price: $24,050

Complete scope of work: complete reroof, electrical panel upgrade to 200amp, and mechanical: cut in new roof-mounted heat pump packaged unit with all new duct work.

☑ Residential ☐ Addition ☐ Remodel ☐ Rebuild

	Existing	Proposed
☐ Living Area	____sf	____sf
☐ Garage/Storage	____sf	____sf
☐ Deck	____sf	____sf
☐ Porch	____sf	____sf
☐ Carport	____sf	____sf
☐ Remodel	____sf	____sf
☐ Other	____sf	____sf

Explain _____

☐ Commercial ☐ Tenant Improvement ☐ Addition

	Existing	Proposed
☐ Office	____sf	____sf
☐ Medical	____sf	____sf
☐ Retail	____sf	____sf
☐ Restaurant	____sf	____sf
☐ Warehouse	____sf	____sf
☐ Other	____sf	____sf

Explain _____

Grading Cut____ Fill____

Area of Vegetation removal____(Sq ft)

Electrical:
☑ Panel change out/upgrade (Main or Sub-panel)
☐ Outlets or fixtures
☐ Solar (roof) ☐ Solar (ground)

Mechanical:
☑ HVAC ~~Change out~~ cut in new
☐ Fireplace/Woodstove/Pellet Stove
☐ Gas ☐ Wood

Plumbing:
☐ Water Heater ☐ DWV
☐ Repairs ☐ Water line
☐ Gas line

Miscellaneous:
☑ Reroof ☐ Reside
☐ Demolition ☐ Window Changeout
☐ Other (explain)

_____
_____
_____

Applicant Information: Please check the appropriate box for the primary contact ☐ AGENT ☑ PROPERTY OWNER ☐ CONTRACTOR ☐ ARCHITECT/DESIGNER ☐ ENGINEER

Agent Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____

Property Owner Name: Jane Skaife Telephone: (530) 400-9792 Email: skaifehome@gmail.com

Address: 8085 Callison Rd. City/State/Zip: Penryn, CA 95663

☐ OWNER/BUILDER? * *Proof of Ownership may be required*

Contractor Name: Danny Victoriano (Kingdom Heating & Air, Inc.) Telephone: (916) 997-6362 Email: dannyv@kingdomhvac.org

Address: P.O. Box 2108 City/State/Zip: Rancho Cordova, CA 95741 License # and Class CSLB # 893632

Architect/Designer Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____ License/Registration # _____

Engineer Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____ License/Registration # _____

Contractor to complete yellow highlighted section **Owner/Builder to complete blue highlighted section**

LICENSED CONTRACTOR DECLARATION: I hereby affirm under penalty of perjury that I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

DATE:_____ CONTRACTOR SIGNATURE:_____

OWNER/BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the Contractors' State License Law for the reason(s) indicated below by the checkmark(s) I have placed next to the applicable item(s) (Section 7031.5, Business and Professions Code: Any city or county that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).)

☐ **I, as owner of the property, or my employees with wages as their sole compensation, will do**
(_) all of *OR* (_) portions of the work, and the structure is not intended or offered for sale (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

☑ **I, as owner of the property, am exclusively contracting with licensed Contractors to construct the project** (Section 7044, Business and Professions Code: The Contractors' State License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the projects with a licensed Contractor pursuant to the Contractors' State License Law.). Kingdom Heating & Air, Inc. - Contractor License # 893632 (CSLB)

☐ **I am exempt from licensure under the Contractors' State License Law for the following reason:**_____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following Web site: http://www.leginfo.ca.gov/calaw.html.

DATE: 4/13/17 OWNER SIGNATURE:_____

WORKERS' COMPENSATION DECLARATION: Please read carefully and check the applicable statement below:

***WARNING:* FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.**

I hereby affirm under penalty of perjury one of the following declarations:

☐ **I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations** as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.
Policy No. ____

☑ **I have and will maintain workers' compensation insurance,** as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:
Carrier Amco Insurance Company Policy No HA 0061856512-1 Expiration Date 09/13/17
Name of Agent Neilson & Phillips Ins. Svs, Inc. Tel No (916) 380-5952

☐ **I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California,** and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

CONSTRUCTION LENDING AGENCY:

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code).
Lender's Name _____
Lender's Address _____

By my signature below, I certify to the following:
I am (_) a California licensed contractor or (☑) the property owner* or (_) authorized to act on the property owner's behalf.**
I have read this construction permit application and the information I have provided is correct. I agree to comply with all applicable city and county ordinances and state laws relating to building construction. I authorize representatives of this city or county to enter the above-identified property for inspection purposes.

TIME LIMITATIONS OF APPLICATION: An application for a permit for any proposed work shall be deemed to have been abandoned 1 year after the date of filing, unless a permit has been issued. The destruction of documents may occur 180 days after application expiration date.

Date: 04/13/17 **SIGNATURE OF APPLICANT:**_____

*** Requires Separate Owner Verification Form** ****Requires Separate Contractor Authorization Form**

COUNTY OF PLACER
Community Development Resource Agency

BUILDING

OWNER BUILDER ACKNOWLEDGEMENT AGENT AUTHORIZATION

IMPORTANT! NOTICE TO PROPERTY OWNER

Dear Property Owner:
An application for a building permit has been submitted in your name listing yourself as the builder of the property improvements specified at _____.
We are providing you with an Owner-Builder Acknowledgment and Information Verification Form to make you aware of your responsibilities and possible risk you may incur by having this permit issued in your name as the Owner-Builder. **We will not issue a building permit until you have read, initialed your understanding of each provision, signed, and returned this form to us at our official address indicated.** An agent of the owner cannot execute this notice unless you, the property owner, obtain the prior approval of the permitting authority.

OWNER'S ACKNOWLEDGMENT AND VERIFICATION OF INFORMATION

DIRECTIONS: Read and initial each statement below to signify you understand or verify this information.

JS ✓ 1. I understand a frequent practice of unlicensed persons is to have the property owner obtain an "Owner-Builder" building permit that erroneously implies that the property owner is providing his or her own labor and material personally. I, as an Owner-Builder, may be held liable and subject to serious financial risk for any injuries sustained by an unlicensed person and his or her employees while working on my property. My homeowner's insurance may not provide coverage for those injuries. I am willfully acting as an Owner-Builder and am aware of the limits of my insurance coverage for injuries to workers on my property.

JS 2. I understand building permits are not required to be signed by property owners unless they are *responsible* for the construction and are not hiring a licensed Contractor to assume this responsibility.

JS 3. I understand as an "Owner-Builder" I am the responsible party of record on the permit. I understand that I may protect myself from potential financial risk by hiring a licensed Contractor and having the permit filed in his or her name instead of my own.

JS 4. I understand Contractors are required by law to be licensed and bonded in California and to list their license numbers on permits and contracts.

JS 5. I understand if I employ or otherwise engage any persons, other than California licensed Contractors, and the total value of my construction is at least five hundred dollars ($500), including labor and materials, I may be considered an "employer" under state and federal law.

JS 6. I understand if I am considered an "employer" under state and federal law, I must register with the state and federal government, withhold payroll taxes, provide workers' compensation disability insurance, and contribute to unemployment compensation for each "employee." I also understand my failure to abide by these laws may subject me to serious financial risk.

JS 7. I understand under California Contractors' State License Law, an Owner-Builder who builds single-family residential structures cannot legally build them with the intent to offer them for sale, unless *all* work is performed by licensed subcontractors and the number of structures does not exceed four within any calendar year, or all of the work is performed under contract with a licensed general building Contractor.

JS 8. I understand as an Owner-Builder if I sell the property for which this permit is issued, I may be held liable for any financial or personal injuries sustained by any subsequent owner(s) that result from any latent construction defects in the workmanship or materials.

JS 9. I understand I may obtain more information regarding my obligations as an "employer" from the Internal Revenue Service, the United States Small Business Administration, the California Department of Benefit Payments, and the California Division of Industrial Accidents. I also understand I may contact the California Contractors' State License Board (CSLB) at 1-800-321-CSLB (2752) or www.cslb.ca.gov for more information about licensed contractors.

JS 10. I am aware of and consent to an Owner-Builder building permit applied for in my name, and understand that I am the party legally and financially responsible for proposed construction activity at the following address: 8085 Callison Rd. Penryn CA 95663

JS 11. I agree that, as the party legally and financially responsible for this proposed construction activity, I will abide by all applicable laws and requirements that govern Owner-Builders as well as employers.

JS 12. I agree to notify the issuer of this form immediately of any additions, deletions, or changes to any of the information I have provided on this form. Licensed contractors are regulated by laws designed to protect the public. If you contract with someone who does not have a license, the Contractors' State License Board may be unable to assist you with any financial loss you may sustain as a result of a complaint. Your only remedy against unlicensed Contractors may be in civil court. It is also important for you to understand that if an unlicensed Contractor or employee of that individual or firm is injured while working on your property, you may be held liable for damages. If you obtain a permit as Owner-Builder and wish to hire Contractors, you will be responsible for verifying whether or not those Contractors are properly licensed and the status of their workers' compensation insurance coverage.

Before a building permit can be issued, this form must be completed and signed by the property owner and returned to the agency responsible for issuing the permit. *Note: A copy of the property owner's driver's license, form notarization, or other verification acceptable to the agency is required to be presented when the permit is issued to verify the property owner's signature.*

Signature of property owner _____ Date: 4/13/17

Note: The following Authorization Form is required to be completed by the property owner only when designating an agent of the property owner to apply for a construction permit for the Owner-Builder.

AUTHORIZATION OF AGENT TO ACT ON PROPERTY OWNER'S BEHALF

Excluding the Notice to Property Owner, the execution of which I understand is my personal responsibility, I hereby authorize the following person(s) to act as my agent(s) to apply for, sign, and file the documents necessary to obtain an Owner-Builder Permit for my project.

Scope of Construction Project (or Description of Work): _____

Permit Number: _____

Project Location or Address: _____

Name of Authorized Agent: _____ Tel No _____

Address of Authorized Agent: _____

I declare under penalty of perjury that I am the property owner for the address listed above and I personally filled out the above information and certify its accuracy. *Note: A copy of the owner's driver's license, form notarization, or other verification acceptable to the agency is required to be presented when the permit is issued to verify the property owner's signature.*

Property Owner's Signature: _____ Date: _____

BUILDING PERMIT

Permit Number
BLD17-02830 **APN: 031-220-062-000** **8085 CALLISON RD, PENRYN, CA 95663**

22.85 AC SEC 23 12 7 Inspection Number (PID): 1702830

Issue Date: 08/29/2017
Expire Date: 8/29/2019
Issued By: Carole Barber
Status: Issued

Owner:	SKAIFE SHAWN & SKAIFE JANE LE	8085 CALLISON RD PENRYN CA, 95663	530-400-9792
Contractor:	PERRYMAN PAINTING & REMODELING INC	P O BOX 42 LOOMIS, CA 95650	9167746416
Architect:			
Engineer			

DESCRIPTION OF WORK

REPLACE ALL WINDOWS, REMODEL KITCHEN, LAUNDRY ROOM, CLOSET, MINOR FRAMING, BATHROOM, SHOWER.
APPROX 200 SQ FT. REMODEL
NO CHANGE TO BEDROOM COUNT
12 WINDOWS LIKE FOR LIKE
3 WINDOWS ENLARGED
KITCHEN FLOOR LOWERED 4"
21' OF SIDINGBEING REPLACED

PROJECT QUANTITY AND VALUE

Description:
N/A

FEES PAID: $879.24

	Area (SqFt)	Value ($)
BATHROOM ADDITION/REMODEL	1	$11,828.11
Total Valuation:		$36,142.81

PERMIT NOT VALID UNLESS SIGNED

I certify that I have read this permit and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this county to enter upon the above mentioned property for inspection purposes. I also agree to save, indemnify and hold harmless the County of Placer against all liabilities, judgment, costs and expenses which may in any way accrue against said county in consequence of granting this permit:

Date: 8/29/17 Signature of applicant/agent: _____

COUNTY OF Placer
BUILDING SERVICES

PERMIT APPLICATION FORM

Only property owners, licensed contractors or agents with written authorization may obtain permits.

Permit # 17-02830
(Office Use Only)

(Please mark all that apply) ☒ RESIDENTIAL ☐ COMMERCIAL ☐ AGRICULTURAL

* Items marked with an (*) may need a grading permit

☐ New Structure *	☐ Addition *	☐ Tenant Improvement	☒ Plumbing	☐ Solar (Roof or Ground)
☐ Second Residence *	☒ Remodel	☐ Ag Building *	☒ Electricol	☐ Swimming Pool
☐ Mobile Home *	☐ Fire Repair	☐ Winery/Wine Tasting *	☐ Mechonicol	☐ Deck/Patio Cover
☐ Modular/MFG Unit *	☐ Garage/Storage *		☐ Reroof	☐ Termite Repair
☐ Guest House *	☐ Demolition		☒ Window change	☐ Other:

Project Address: 8085 Callison Rd., Penryn 95663 **APN#:** 051-220-062

Nearest Cross Street or Intersection: Taylor Rd. **Total Contract Price:** 30,000

COMPLETE SCOPE OF WORK: Replace Windows, New kitchen, New Laundry Rm New Closet, Minor Framing, New shower; windows c/o + SLIDING (22)

☒ Residential New ☐ Addition ☒ Remodel ☐ Rebuild	Proposed Sq. Ft. of work area	☐ Commercial New ☐ Tenant Improvement ☐ Addition	Proposed Sq. Ft. of work area
☐ Living Area	_____ sf	☐ Office	_____ sf
☐ Garage/Storage	_____ sf	☐ Medical	N/A _____ sf
☐ Deck	_____ sf	☐ Retail	_____ sf
☐ Porch	_____ sf	☐ Restaurant	_____ sf
☐ Carport	_____ sf	☐ Warehouse	_____ sf
☒ Remodel	200 sf	☐ Other	_____ sf
☐ Other	_____ sf		
Explain _____		Explain _____	

Applicant Information: Please check the appropriate box for the primary contact

☐ AGENT ☐ OWNER/BUILDER? ☐ PROPERTY OWNER ☐ ENGINEER
☒ CONTRACTOR *Proof of Ownership may be required* ☐ ARCHITECT/DESIGNER

If you would like to be notified with inspection information, please provide your email address: timeperrymanpainting.com

Property Owner Name: Jane Skaife Telephone: 530-408-9798 Email: _____

Address: 8085 Callison Rd City/State/Zip: Penryn, CA 95663

Agent Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____

Contractor Name: Tim Perryman Telephone: 916 417 0673 Email: timeperrymanpainting@.com

Address: PO Box 42 City/State/Zip: Loomis CA 95650 License # and Class B 948889

Architect/Designer Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____ License/Registration # _____

Engineer Name: _____ Telephone: _____ Email: _____

Address: _____ City/State/Zip: _____ License/Registration # _____

$ 879.24

OWNER BUILDER DECLARATION

I HEREBY AFFIRM UNDER PENALTY OF PERJURY THAT I AM EXEMPT FROM THE Contractors' State License Law for the reason(s) indicated below by the checkmark(s) I have placed next to the applicable item(s) (Section 7031.5, Business and Professions Code: Any City or County that requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for the permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors' State License Law (Chapter 9, commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt from licensure and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500):

☐ I, as owner of the property, or my employees with wages as their sole compensation will do ☐ all of or ☐ portions of the work, and the structure is not intended or offered for sale (Section 7044, business and Professions Code: The Contractors' State License Law does not apply to an owner of the property who, through employees' or personal effort, builds or improves the property, provided that the improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the Owner-Builder will have the burden of proving that it was not built or improved for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Section 7044, Business and Professions Code: The Contractors' License Law does not apply to an owner of property who builds or improves thereon, and who contracts for the project with a licensed contractor pursuant to the Contractors' State License Law).

☐ I am exempt from licensure under the Contractors' State License Law for the following reason:

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website: http://www.leginfo.ca.gov/calaw.html

Property Owner/Authorized Agent Signature Date

LICENSED CONTRACTOR DECLARATION

I hereby affirm that under penalty of perjury I am licensed under the provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business & Professions Code: License Class and License # will be verified by CSLB

Contractor's Signature 7/5/17 Date

WORKERS' COMPENSATION DECLARATION

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

I hereby affirm under penalty of perjury one of the following declarations:

☐ I have and will maintain a certificate of consent to self-insure for workers' compensation, issued by the Director of Industrial Relations as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

☒ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

☐ I certify that, in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to be come subject to the workers' compensation laws of California, and agree that, if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

DECLARATION REGARDING CONSTRUCTION LENDING AGENCY
I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code).

Construction Lender's Name and Address

By my signature below, I certify to each of the following: I am ☒ a California Licensed Contractor or ☐ authorized to act on the Contractor's behalf** or ☐ the property owner* or ☐ authorized to act on the property owner's behalf**

- I have read this construction permit and the information I have provided is correct. I agree to comply with all applicable City or County ordinances and state laws relating to building construction. I authorize representatives of this City or County to enter the above-identified property for inspection purposes.

TIME LIMITATIONS OF APPLICATION AND PERMIT: An application for permit for any proposed work shall be deemed to have been abandoned 1 year after the date of filing, unless a permit has been issued. The destruction of documents may occur 180 days after application expiration date. An issued permit will expire 2 years from date of issue. You will NOT be notified prior to the expiration of your permit. If you allow the permit to expire prior to completion of the project, a new permit will be required and you may become liable for additional fees including but not limited to administrative fees, inspection fees, and impact fees. Building construction plans that were submitted may also be destroyed upon permit expiration, subject to new building construction codes.

Signature California Licensed Contractor, Property Owner* or Authorized Agent** 7/6/17 Date

*Requires separate verification form **Requires separate authorization form

BUILDING PERMIT

3449 — 3.57

AUBURN
219 Maple Street
TU 5-8573

DEPARTMENT OF PUBLIC WORKS, COUNTY OF PLACER
BUILDING INSPECTION DIVISION
AUBURN, CALIFORNIA

TAHOE CITY
P.O. Box 84
JU 3-3950

DISTRICT 2

PERMISSION TO BUILD, OCCUPY, AND USE, ONLY AS SPECIFIED BELOW, IS HEREBY GRANTED

TO [illegible] — MAILING ADDRESS Box 625- Lincoln — PHONE NO. — DATE 11-29-57

FORMER OWNER OF LAND — CONTRACTOR OR OWNER BUILT Owner

PARCEL NO.

LOCATION OF JOB North side Gallison Rd - Taylor Rd // — JOB STREET ADDRESS /// appx 500yds- East

LOT	BLOCK	SUBDIVISION	SECTION	TOWNSHIP	RANGE
			23	12	7

BLDGS.	USE	ROOMS	STORIES	CONSTR.		FLOOR AREA SQ. FT.
Kitchen Addition & Porch		1	1	Fr	Porch 70sf	224

TUBS	SHOWERS	TOILETS	LAVATORIES	SINKS	DRYER	WASHER OR LAUNDRY TRAYS	DISHWASHER	SEWAGE DISPOSAL	LEACHLINE	WATER
				1						

RANGE	HEATING	WATER HEATER
E		

SIZE OF LOT 54 Acres	HEALTH DEPT. APPROVAL	VALUE	2,345.00
OTHER BLDGS. ON LOT	ROAD DEPT. APPROVAL	PERMIT FEE	12.00
ZONE / OCCUPANCY TYPE	PLANNING COMM. APPROVAL	PLAN CHK FEE	
SETBACK STREET 20'	THIS CONSTRUCTION AUTHORIZED AND PERMIT ISSUED BY	ELECT. FEE	4.50
SETBACK SIDELINE Acreage	J. R. BELL, CHIEF INSPECTOR	PLUMBING FEE	6.50
SETBACK REAR P.L. Acreage	BY Edna Nations CLERK	PENALTY	
		TOTAL FEES	23.00

REMARKS

7425-

NUMBER FILE

BUILDING DEPARTMENT
County of Placer

219 Maple Street, Auburn, Calif. — County Administrative Center, Tahoe City, Calif. P. O. 84

FOR OFFICE USE
Permit No. 5207
District 4-2
Date 4-30-45

APPLICATION FOR BUILDING PERMIT

(Permit will not be issued unless application is completed in detail.)

(Please Print)
Owner of Project Eugene A Page Address Box 625 - Lincoln
Former Owner of Land Myrtle Page Address Box 625 - Lincoln
Contractor or Builder owner Address
County Business License No. Workmen Insured Yes ☐, No ☐
LOCATION of job is on the (North X, South, East, West,) side of Gallison Rd.
(Name of street, road, private road, etc.)
Nearest crossroad is Taylor Rd. - 500 yds.
(Name and indicate distance to the above road)

DESCRIPTION FROM DEED: Lot, Block, Subdivision
Section 23 Township 12 North, Range 7 East.
Parcel No. General Area Newcastle.

DESCRIPTION OF WORK: (Mark in number of buildings).
New building Additions ✓ Alterations Repairs Moving
Proposed use of each unit, square feet and number of rooms Kitchen addition - porch - 76 ft Square footage 224

CONSTRUCTION: (Main project) Frame ☑, Stucco ☐, Block ☐, Brick ☐, Other
Stories one Wall finish outside siding Foundation concrete Subfloor wood
Floor joists and spacing 2x6 - 16 oc Studs 2x4 - 16 oc Ceiling height 8 ft.
Inside walls sheet rock Ceiling joists 2x6 - 16 oc
Roof asb. Rafters 2x4 - 24 oc Pitch 4 12 Fireplace
No. Plmb. Fixtures: Tubs Showers Toilets Lavatories Sinks 1 Laundry Trays
Kitchen range electric Heating Water Heater Sewer Meter Amps 100
(Appliances gas or electric?)
Size of septic tank in gals Leaching lines Domestic water supply
Size of lot 5 acres Other buildings on lot shop, garage, barn Zone
Set back from street front 20', Set back side lines acc., Set back rear acc.

State total current valuation of each building, including all plumbing, septic tanks, cement walks, heating units, pressure systems built into the structures and all other equipment that has become a permanent part of the buildings. The valuation should include the owner's labor and any material he may have had on hand.

Valuation $ 345.00 Fee $ 12.00 Elec. Fee $ 1.50 Plmb. Fee $ 6.50 Plan Check $
Receipt# 7465 Total Fee $ 20.00

I certify that the above statements are correct and that I will comply with the provisions of the Building Code referred to by County Ordinances as amended, all zone requirements, and other State and County Ordinances or Laws pertaining to the above.

Inspector's Signature R H York Signed Eugene Page

THIS CERTIFICATION IS REQUIRED BY LAWS OF THE STATE OF CALIFORNIA

COUNTY OF PLACER

Division of Building Inspection

I hereby certify that I am licensed under the provisions of Chapter 9, Division 3, of the State of California Business and Professions Code in the Classification _____ License No._____ and further certify that the aforesaid license is in full force and effect.

Date:_____ Signed:_____

Address_____

I hereby certify that I am exempt from the Contractors License Laws of the State of California under Section 7031.5 because of one or more of the following conditions:

1. ✓ I am the owner of the property and the structure is being built for the occupancy of the owner and will not be offered for sale within the year. (Sec. 7044)

2. _____ The building does not contain more than three (3) dwelling units, one of which will be occupied by me as the owner. (Sec. 7044)

3. _____ As the owner, I am contracting with a licensed contractor to construct the project. (Sec. 7050)

4. _____ Aggregate total of the contracts is not more than $100.00 for labor, material and all other items of work. (Sec. 7048)

5. _____ I am a licensed architect, engineer, or structural pest control operator operating within the scope of my license. (Sec. 7051)

6. _____ I am furnishing materials and supplies without fabrication as exempted by Sec. 7052 of the State Contractors License Laws. (Sec. 7052)

7. _____ I am an employee with wages as my sole compensation. (Sec. 7053)

8. _____ The property is in the ownership of the Federal Government. (Sec. 7047)

Date: 11-26-65 Signed: Genevieve Page
(owner)

Signed:_____
(agent for Owner)

Owners Address_____

_____

Phone:_____

Permit issued by this
Certification No._____

By _____

COUNTY OF PLACER

DEPARTMENT OF PUBLIC WORKS
Division of Building Inspection

APPLICATION FOR ELECTRICAL PERMIT

Date 11-24- 1965 Permit No. 5707

The undersigned hereby makes application to the County of Placer for a permit to install electrical fixtures and/or wiring as listed on the reverse side hereof, and agrees to install said fixtures and/or wiring in accordance with the provisions of all local Ordinances and all other laws applicable thereto.

USIE OF PREMISES

CONTRACTOR

OWNER Eugene N. Poe

JOB ADDRESS N. Gallison Rd.

SIGNED Eugene N. Poe

	NO.	EACH	FEES
FOR PERMIT			1.00
Temporary Pole		1.00	
Meter New meter		1.00	1.00
Outlets	4	1.00	1.00
Range/Dryer/Water Heater	2	.75	1.50
Elec. Heater (Per KW)			
1 KW Per 100		.25	
Motor (to 1 HP)		.50	
Motor (1 to 5 HP)		1.00	
Motor (5 to 20 HP)		1.50	
Motor (over 20 HP)		3.00	
		TOTAL FEES	4.50

County of Placer

DEPARTMENT OF PUBLIC WORKS
Division of Building Inspection

APPLICATION FOR PLUMBING AND GAS PERMIT

Date 11-26 1965 Permit No. 5907

The undersigned hereby makes application to the County of Placer for a permit to install plumbing fixtures and/or pipes; gas appliances and/or pipes listed on the reverse side hereof, and agrees to install said fixtures, appliances and/or pipes in accordance with the provisions of all local Ordinances and all other laws applicable thereto.

OWNER Eugene P. Page
PLEASE PRINT

JOB ADDRESS N. Gibson Rd.

USE OF PREMISES Res. addition

Eugene Page Loomis-Lincoln 663-3684
SIGNED ADDRESS PHONE NO.

Plumbing	Gas Piping & Appliances	Total Fee
		6.50

Item	No.	Ea.	Fee
For issuing each permit	✓	$2.00	2.00
In addition —			
For each plumbing fixture or trap or set of fixtures on one trap (including water, drainage, piping and backflow protection therefor)	2	1.50	3.00
For each building sewer and each trailer park sewer		2.50	
Rainwater systems - per drain		2.00	
For each cesspool		5.00	
For each private sewage disposal system		3.00	
For each water heater and/or vent		1.50	
For each gas piping system of one (1) to five (5) outlets		1.50	
For each gas piping system of six (6) or more, per outlet		.30	
For each industrial waste pre-treatment interceptor, including its trap and vent, excepting kitchen type grease interceptors functioning as fixture traps		1.00	
For installation, alteration or repair of water piping and/or water treating equipment	✓	1.50	1.50
For repair or alteration of drainage or vent piping		1.50	
For each lawn sprinkler system or any one meter including backflow protection devices therefor		2.00	
For vacuum breakers or backflow protective devices on tanks, vats, etc., or for installation on unprotected plumbing fixtures including necessary water piping - one (1) to five (5)		2.00	
Over five (5) each		.30	

4 6.50

BUILDING PERMIT

3945 3907

AUBURN
219 Maple Street
TU 5-8573, 885-4573

DEPARTMENT OF PUBLIC WORKS, COUNTY OF PLACER
BUILDING INSPECTION DIVISION
AUBURN, CALIFORNIA

TAHOE CITY
P.O. Box 84
JU 3-3950

DISTRICT # 2
Newcastle

PERMISSION TO BUILD, OCCUPY, AND USE, ONLY AS SPECIFIED BELOW, IS HEREBY GRANTED

TO Eugene A. Lago

MAILING ADDRESS Box 625- Lincoln

PHONE NO.
DATE 11-29-65

FORMER OWNER OF LAND

CONTRACTOR OR OWNER BUILT Owner

PARCEL NO.

LOCATION OF JOB North side Callison Rd - Taylor Rd

JOB STREET ADDRESS 1000 ft west Taylor Rd. approx 500 yds. East

Lot lies to W of from Taylor Rd straight chain way back and around Tuma across SP tracks.

LOT | BLOCK | SUBDIVISION | SECTION 23 | TOWNSHIP 12 | RANGE 7

West side of Callison

BLDGS.	USE	ROOMS	STORIES	CONSTR.		FLOOR AREA SQ. FT.
Kitchen Addition & Porch		1	1	Fr	Porch 70sf	224

TUBS	SHOWERS	TOILETS	LAVATORIES	SINKS	DRYER	WASHER OR LAUNDRY TRAYS	DISHWASHER	SEWAGE DISPOSAL	LEACHLINE	WATER
				1						

RANGE | HEATING | WATER HEATER

SIZE OF LOT 5± Acres	HEALTH DEPT. APPROVAL	VALUE	2,345.00
OTHER BLDGS. ON LOT	ROAD DEPT. APPROVAL	PERMIT FEE	12.00
ZONE / OCCUPANCY TYPE	PLANNING COMM. APPROVAL	PLAN CHK FEE	
SETBACK STREET 20'	THIS CONSTRUCTION AUTHORIZED AND PERMIT ISSUED BY	ELECT. FEE	4.50
SETBACK SIDELINES Acreage	J. R. BELL, CHIEF INSPECTOR	PLUMBING FEE	6.50
SETBACK REAR P.L. Acreage	BY [signature] CLERK	PENALTY	
		TOTAL FEES	23.00

REMARKS

INSPECTION COPY

INSPECTIONS

DATE	STRUCTURAL	
	SETBACK	
	FOUNDATION	J.T.
12-21-66	GIRDERS	J.T.
12-21-66	FRAME & LATH	J.T.
	FIRE PLACE	
	SHEET ROCK	
	STUCCO	
	ROOFING	
1-20-67	FINAL	J.T.
	OTHER APPROVALS	

DATE	ELECTRICAL	
	POWER POLE	
10-21-66	ROUGH	J.T.
	UNDERGROUND	
	METER HOOK-UP	
	FINAL	

DATE	PLUMBING	
12-21-66	GROUND	J.T.
10-21-66	TOP OUT	J.T.
	GAS TEST	
	METER HOOK-UP	
	FINAL	

DATE	HEATING	
	DUCTS	
	FLUES	
	FURNACE	
	FINAL	

NOTES: 1-20-67 no one home but looks all completed on this addition J.T.

C O 3806

PLACER COUNTY BUILDING DEPARTMENT

AUBURN OFFICE (530) 889-7470 — TAHOE OFFICE (530) 581-6280

OWNER'S NAME: Francis Wing	PHONE NO: 408-762-3417
MAILING ADDRESS: PO Box 1411 Mt View	
CONTRACTOR'S NAME: AUBURN ROOFING	PHONE NO: 530-823-8400
CONTRACTOR'S ADDRESS: 150 ELM AVENUE AUBURN CA 95603	CSLB NO: 375323
CONTRACTOR'S TAX ID NO:	BUS LIC NO:
ARCHITECT OR ENGINEER NAME & ADDRESS:	
ADDRESS OF CONSTRUCTION: 7851 Calburn Rd. Penryn	
CROSS STREET: Sisley Rd	
DESCRIPTION:	COPIES NO:

12/10- please schedule final inspection anytime — job is complete.

PERMIT NO. R02-0045 (34)

APN: 032-124-058

OFFICE PERMIT NO: — BUILDING PERMIT NO:

DATE OF ISSUANCE OF PERMIT: 12/31/2002

RESIDENTIAL ☒ COMMERCIAL ☐ OTHER ☐

DESCRIPTION OF WORK TO BE DONE: REROOF

YEAR BUILT: 1980

DETAILS: 9/12 30yr comp

MINIMUM CLASS A ROOFING ASSEMBLY REQUIRED

CONTRACT PRICE $ 11515.00

BLDG	OCCUPANCY	VALUATION
	PERMIT FEE	$ 116.10
1%	SEISMIC FEE	1.15
	TOTAL FEE	$ 116.25

REROOF INSPECTIONS

ITEM	INSPECTOR/DATE
FRAME/RHI/ATTIC/PRE-WALL ETC.	
ROOF PLYWOOD	
OTHER PLY-WOOD	
DRAG PLY-WOOD	
ROOFER BLDG	
ROOFER NAIL	
ROOFER GAP	
ROOFER FRAME	
FINAL APPROVAL-APPROVED FOR OCCUPANCY	
CLASS A FIRE RESISTIVE	
REROOF FINAL	12/10/03
FINAL INSPECTOR	

CLASS A FIRE RETARDANT ROOFING CERTIFICATE OF COMPLIANCE

This is to certify that the roof covering installed on the structure identified below meets the requirements for a *Class A Roof Covering* as required for the location of the structure.

R02-0045-34 BUILDING PERMIT NUMBER	 ASSESSOR'S PARCEL NUMBER
Francis Wong PROPERTY OWNER	7851 Calliope Rd Penryn BUILDING ADDRESS
ELK Corporation ROOFING MANUFACTURER	Class A ROOFING TYPE
Auburn Roofing Inc INSTALLER (PRINT)	375323 CONTRACTOR'S LICENSE NUMBER
 SIGNATURE (INSTALLER)	agent 12/10/03 TITLE DATE

The roofing installer shall provide this completed ***Certificate of Compliance*** to the field inspector prior to final inspection of the structure.

REF. California Health and Safety Code § 13132.7

AP# 032-124-080 MLD# _____ SUB. _____

CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS
7/31/19	WP 9243	Site verification for new well & destruction of Hand dug well		SR
	WP 9244			
7/31/19	WP 9243 9244	Issued new well and well destruction permits		SR
8/23/19	WP 9243	Well seal and well		
	WP 9244	destruction.	SR	

Plac County Health & Human Services
ENVIRONMENTAL HEALTH SERVICES
3091 County Center Dr,
Suite 180 ,
Auburn CA 95603
Phone (530) 745-2300 Fax (530)745-2370

775 North Lake Blvd, Suite 203
Tahoe City, CA96145
Ph:(530) 581-6240 : Fax(530)581-6242

Ref: 6775.rpt

PLUS #

PERMIT/WP # WP0009244

WELL FINAL CERTIFICATE

Well Driller Name: PETER'S DRILLING & PUMP
Final Inspection Date: 09/06/2019
APN: 032-124-042-000
Date and Specific Time of Well Seat /
Location of Well: 7535 RIDGEVIEW LN PENRYN 95663-

Property Owner: MIMA CAPITOL LLC
Telephone:
Mailing Address: 4120 DOUGLAS BLVD. #306-175 GRANITE BAY CA 95746-

WELL SPECIFICATIONS

Work Completed: WELL - DESTRUCTION PERMIT
Type of Welt INDIVIDUAL DOMESTIC
Depth of Well (ft): 80'

Well Production Test (from Well Driller's report)
Pumping Rate (gpm):
Static Level (ft):
Storage Requirement (gal):

Duration of Continuous Pumping (hours):
Test Performed By: Driller
Date:

Annular Seal:
Seal Depth (ft):
Material:
Witnessed By : RATH, LAURA
Date: 08/23/2019
ATF By: ,
ATF Date:

Inspection Waived? N/A
If yes, explain:
How was seal applied?

Based upon information provided by the contractor and conditions observed during site inspection...
the well meets minimum construction standards? N/A
the well was drilled in an approved area? N/A
the State Water Well Driller's Report was received? N/A
this well is considered a standby well? N/A

Letter of intent received to keep...
Existing Hand Dug Well? N/A
Existing Drilled Well? N/A
Standby Well? N/A
N/A? N/A

Comments: WELL WAS DESTROYED AND FILLED WITH PEA GRAVEL FROM80' - 29', BENTONITE FROM 29'-5', AND NATIVE SOIL FROM 5'-0'.

CONDITIONS OF PERMIT MET : Laura Rath REHS Date: 9/10/19

STATEMENT OF SATISFACTORY WELL CONSTRUCTION/DESTRUCTION COMPLETION

This is to certify that the well construction/destruction work observed during site inspections is in compliance with pertinent ordinances, regulations and conditions of the permit. Issuance of this certification is in no way a guarantee of perfect or indefinite operation of this system.

Environmental Health Representative: Mitch Cain Date: 9-6-19

Placer County Health & Human Services
ENVIRONMENTAL HEALTH SERVICES
3091 County Center Dr,
Suite 180 ,
Auburn CA 95603
Phone (530) 745-2300 Fax (530)745-2370

775 North Lake Blvd, Suite 203
Tahoe City, CA96145
Ph:(530) 581-6240 : Fax(530)581-6242

Ref: 6775.rpt

PLUS #

PERMIT/WP # WP0009243

WELL FINAL CERTIFICATE

Well Driller Name: PETER'S DRILLING AND PUMP
Final Inspection Date: 09/06/2019
APN: 032-124-042-000
Date and Specific Time of Well Seal August 23, 2019 /
Location of Well : 7535 RIDGEVIEW LN PENRYN 95663-

Property Owner: MIMA CAPITOL LLC
Telephone:
Mailing Address: 4120 DOUGLAS BLVD. #306-175 GRANITE BAY CA 95746-

WELL SPECIFICATIONS

Work Completed: WELL - DOMESTIC/PUBLIC WELL PERMIT
Type of Well INDIVIDUAL DOMESTIC
Depth of Well (ft): 120'

Well Production Test (from Well Driller's report) Pumping Rate (gpm): 60
Static Level (ft): 25'
Storage Requirement (gal): 0.00

Duration of Continuous Pumping (hours): 4
Test Performed By: Driller Date: 08/23/2019

Annular Seal:
Seal Depth (ft): 29' Material: BENTONITE
Witnessed By : RATH, LAURA Date: 08/23/2019
ATF By: , ATF Date:

Inspection Waived? NO
If yes, explain:
How was seal applied? POUR

Based upon information provided by the contractor and conditions observed during site inspection...
the well meets minimum construction standards? YES
the well was drilled in an approved area? YES
the State Water Well Driller's Report was received? YES
this well is considered a standby well? N/A

Letter of intent received to keep...
Existing Hand Dug Well? N/A
Existing Drilled Well? N/A
Standby Well? N/A
N/A? N/A

Comments:

CONDITIONS OF PERMIT MET : Laura Rath REHS Date: 9/10/19

STATEMENT OF SATISFACTORY WELL CONSTRUCTION/DESTRUCTION COMPLETION
This is to certify that the well construction/destruction work observed during site inspections is in compliance with pertinent ordinances, regulations and conditions of the permit. Issuance of this certification is in no way a guarantee of perfect or indefinite operation of this system.

Environmental Health Representative: Mark Carr Date: 9-6-19

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES

WELL SEAL INSPECTION FORM

REQUESTER/DRILLER NAME: Pete's DATE: 8/23/19 TIME: 9:30

OWNER NAME: MIMA Capitol

LOCATION: 7535 Ridgeview

Type of Work: (New Well) Destruction Reconstruction

Well Use: (Ind. Domestic) Public Agricultural

APN: 032-124-042 PERMIT/SR# UP" 9243

DATE & TIME OF INSPECTION: 8/23/19 9:30

ANNULAR SEAL INSPECTION WAIVED? [ ] YES [✓] NO If yes, Reason N 38.86766

WELL DRILLED IN APPROVED LOCATION? [✓] YES [ ] NO W 121.16258

AT THE TIME OF INSPECTION:

DEPTH OF WELL: 120' APPROXIMATE YIELD: alot unknown FIRST WATER: 60

DEPTH OF CASING: 200 CASING MATERIAL: PVC PERFORATIONS: 75-100'

ANNULAR SEAL DEPTH: 29' SEALING MATERIAL: Bentonite # OF BAGS 11 (POUR/PUMP)

MEETS MINIMUM CONSTRUCTION STANDARDS? [✓] YES [ ] NO

COMMENTS:	Hardrock Level	Size of Bit	Static Level	Type of Packer
	95'		25'	Visqueen

2 Concrete -

Bentonite - ~~THH THH~~ I

Inspector: Lana Rea Date: 8/23/19

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES

WELL SEAL INSPECTION FORM

REQUESTER/DRILLER NAME: Peter's DATE: 8/23/19 TIME: 9:30

OWNER NAME: MIMA Capital

LOCATION: 7535 Ridgeview

Type of Work: New Well (Destruction) Reconstruction

Well Use: (Ind. Domestic) Public Agricultural

APN: 032-124-042 PERMIT/SR# WP#9244

DATE & TIME OF INSPECTION: 8/23/19

ANNULAR SEAL INSPECTION WAIVED? [ ] YES [ ] NO If yes, Reason

WELL DRILLED IN APPROVED LOCATION? [ ] YES [ ] NO

AT THE TIME OF INSPECTION: Destruction

DEPTH OF WELL: APPROXIMATE YIELD: FIRST WATER:

DEPTH OF CASING: CASING MATERIAL: PERFORATIONS:

ANNULAR SEAL DEPTH: SEALING MATERIAL: # OF BAGS 18 (POUR/PUMP)

MEETS MINIMUM CONSTRUCTION STANDARDS? [ ] YES [ ] NO

COMMENTS: **Hardrock Level** **Size of Bit** **Static Level** **Type of Packer**

- Pea gravel to 29' feet, static water level 25'

Bentonite 𝍸 𝍸 𝍸 111 (18)

- Filled to top.

Inspector: Laura Pat **Date:** 8/23/19

Check No. —
Receipt No. —
Amount —
Date: 7/25/19
By: mc
Permit No. 9244
Dt. Issued 7-31-19
By: MC
FOR OFFICE USE ONLY

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES

3091 County Center Dr., Ste. 180 , Auburn CA 95603 (530) 745-2300
Tahoe Office: 775 N. Lake Blvd. Ste. 203 (P.O. Box 1909), Tahoe City, CA 96145 (530) 581-6240

PE: 4546 OW: — FA: — WP: 9244

WATER WELL APPLICATION/PERMIT

To Construct, Repair, Reconstruct or Destroy A Water Well

APN 032.124.042 Well Driller: PETERS' DRILLING & PUMP P.O. BOX 1546 GRASS VALLEY, CA 95945 CL# 456136 Type: C-57
MLD# ____ Address: ____ Phone: ____
Subdivision: ____ Property Owner: MMA Capital LLC
Parcel/Lot# ____ Address: 4120 Douglas Blvd. #306-175 Phone: ____
Parcel Size ____ City: Granite Bay, CA Zip 95746
Zoning** ____
Job Address/Location 7535 Ridgeview, Penryn, CA 95663
Concerns or Comments: ____

Type of Work: ☐ New Well ☒ Destruction* ☐ Deepening ☐ Modification ☐ Other

Well Use: ☐ Individual ☐ Public ☐ Agricultural ☐ Other ____

Are there any existing wells on the property? ☒ Yes ☐ No

Are there presently any abandoned wells on the property? ☐ Yes ☒ No

Are alternate drilling sites indicated?*** ☐ Yes ☒ No

Distance to nearest: Septic tank 150'+ Leaching field 150'+ Seepage pit 150'+
Sewer line 100' Property line 100'+ Other well 67'

An application is complete only when the form is filled out in full, is signed by the licensed well driller and accompanied by the following:

1. A vicinity map and clear written directions to the proposed well site.
2. Copy of assessor's plat.
3. Appropriate permit filing fee.
4. Two(2) copies of an accurate site plan drawn to scale showing property lines, existing wells, sewage systems, sewer lines, animal feed lots, and all other features of potential contamination. Also show location of restrictions, e.g. easements, rights of way, sewer lines.

WORKER'S COMPENSATION DECLARATION

(One of the following must be completed)

☐ 1. A certified copy of Worker's Compensation Insurance is hereby furnished.
☒ 2. A current effective certificate is filed with the County Building Department or Environmental Health Services.
☐ 3. I certify that in performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the Worker's Compensation of California.

I have read and understand the statements, ordinance requirements and permit conditions (located above & on the back of page) and certify that all relevant activities will be performed in compliance with these statements and applicable code. I have shown all easements on the property.

Well Driller's Signature: [signature] Date 7/23/19

DISPOSITION OF APPLICATION
(For Environmental Health Use Only)

Was a variance necessary for this work? ☐ Yes ☑ No

☑ Approved ☐ Denied (Refer to Water Well Permit Denial Notice)

Conditions: Destruction approved per well destruction plan SUBMITTED

Environmental Health Representative: [signature] Date: 7/31/19

* **Complete an Abandoned Well Destruction form and submit with application.**
** **Additional information needed for "Standby Well" use.**
*** **If the location of the actual productive well is different from the primary drilling site, immediately submit a revised plot plan showing the site of the productive well and indicate the holes that have been destroyed.**

Sent 7-31-19 MC

White/File Canary/Driller

ORDINANCE REQUIREMENTS

A. Submission of an incomplete application or omission of required information as outlined will result in a delay in processing your permit. The effective application receipt date will be the date on which all required information is received.

B. The permit can be denied if is found that issuance of the permit is not in the public interest, the application information is false, proposed work is not in compliance with the ordinance, there are abandoned wells on the property and there is no application for destruction, proposed construction prohibits zoned use of adjoining property, or the construction will be detrimental to surrounding property.

C. An application becomes a permit when approved and signed by Environmental Health Services personnel.

D. A permit issued is valid for one (1) year from the date of issuance. All work must be completed within that time. A new permit or permit renewal must be obtained to continue work after the initial permit expires. Permits are non-transferable.

E. Well work performed without a permit can result in a penalty fee, regulatory action and/or legal action.

F. Well driller must maintain a copy of the drilling permit at the drilling site during all phases of work.

G. Well construction, destruction or modification under a permit is subject to conditions or instructions by Environmental Health Services to carry out the ordinance objectives.

H. Except as otherwise specified, all construction, modification and destruction of wells must be in accordance with the Department of Water Resources Bulletin 74-81 and all of its subsequent supplements or revisions.

I. The well driller must phone Environmental Health Services a minimum of two(2) hours prior to sealing the annular space. At the scheduled inspection the Environmental Health representative will wait 15 minutes for commencement of the seal installation. If the driller fails to present within that time or if the driller is not ready to place the seal, a reinspection fee will be charged before rescheduling the reinspection. The well driller may postpone the seal inspection without a reinspection charge if the driller notifies the Environmental Health at least one(1) hour before the scheduled time. Only one postponement without reinspection charge will be allowed for each inspection request.

H. The state DWR Form 188 must be submitted to Environmental Health Services within 90 days of completion of the work.

PERMIT CONDITIONS

- This permit is non-transferable.
- This permit is valid for one(1) year from date of issue.
- A permit may be renewed only if application is made prior to expiration date.
- Issuance of a permit in no way indicates a guarantee of perfect or indefinite operation of this system.
- The well driller shall notify Environmental Health Services a minimum of 2 hours prior to sealing the well annular space.
- Construction work shall be performed by a licensed C-57 well drilling contractor and in compliance with standards prescribed in the California Department of Water Resources Bulletin 74-81 and all revisions.
- The well shall be located on the property as indicated on the approved plot plan.
- Environmental Health Services may condition this permit in any manner to carry out the purposes of the ordinance.
- Any abandoned wells on the property shall be destroyed in accordance with the standards referenced above.

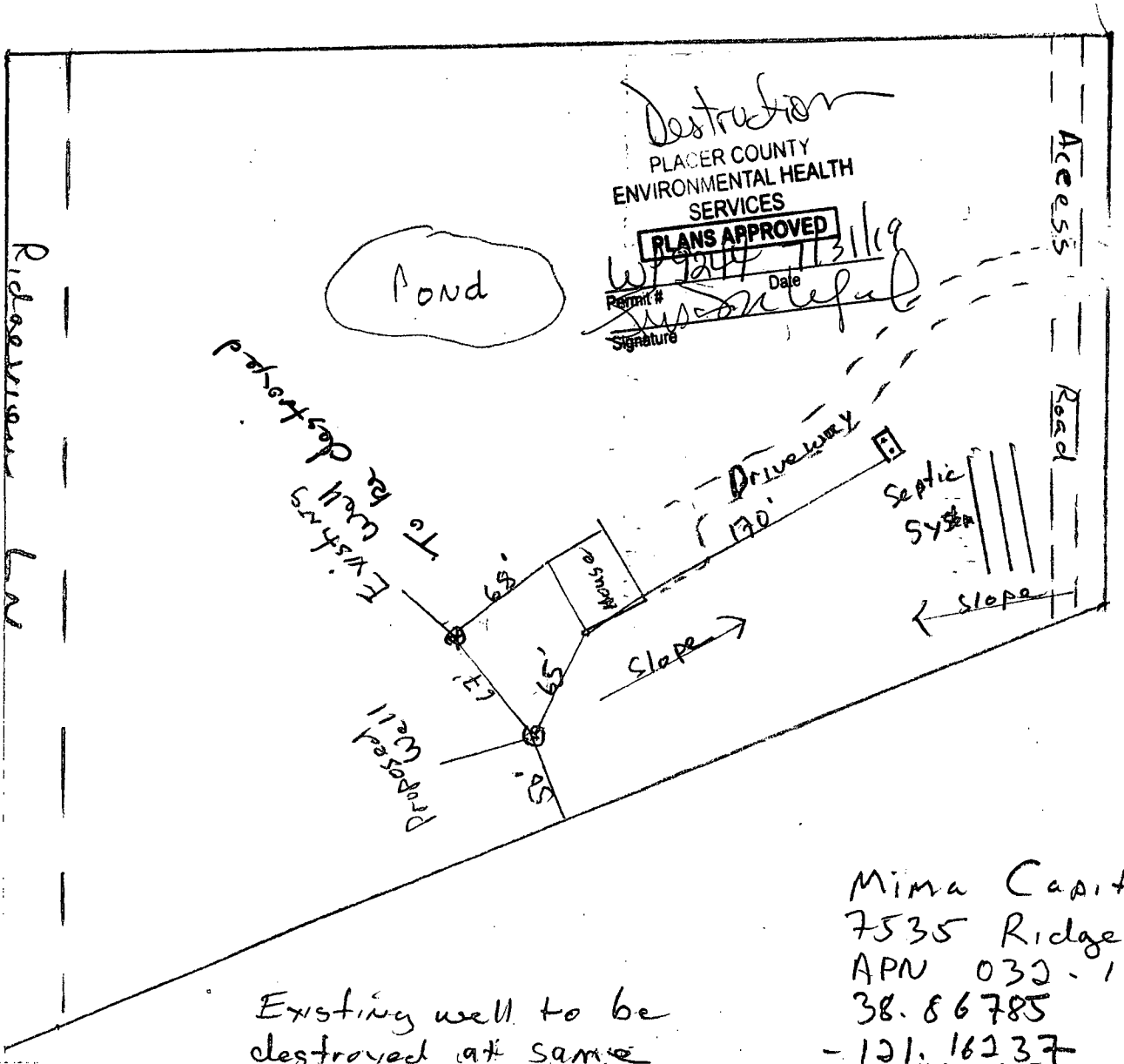
LIABILITY FOR DAMAGES:

The applicant/permittee shall defend, indemnify, and hold harmless Placer County, and its agents, officers, and employees, from all claims, liability, damages, costs, lawsuits, and judgments for property damage, for personal injury, for construction costs or claims which may arise out or be alleged to relate to applicant's/permittee's work performed under a permit. The applicant's/permittee's obligations hereunder shall include the defense and indemnification of Placer County from any claim, liability, damages, costs, lawsuits, or judgments as asserted by any third party, expressly including any party under contract with applicant/permittee to perform any of the work under this application/permit.

PETERS'
DRILLING &
PUMP SERVICE

www.petersdrilling.com
State License No. 456136

P.O. Box 1546
1005 Idaho Maryland Road
Grass Valley, CA 95945
Phone: (530) 273-8136
(530) 888-7311
Fax: (530) 273-1213



Existing well to be destroyed at same time new well is sealed

Mima Capital LLC
7535 Ridge View
APN 032-124-042
38.86785
-121.16237

PETERS'
DRILLING &
PUMP SERVICE

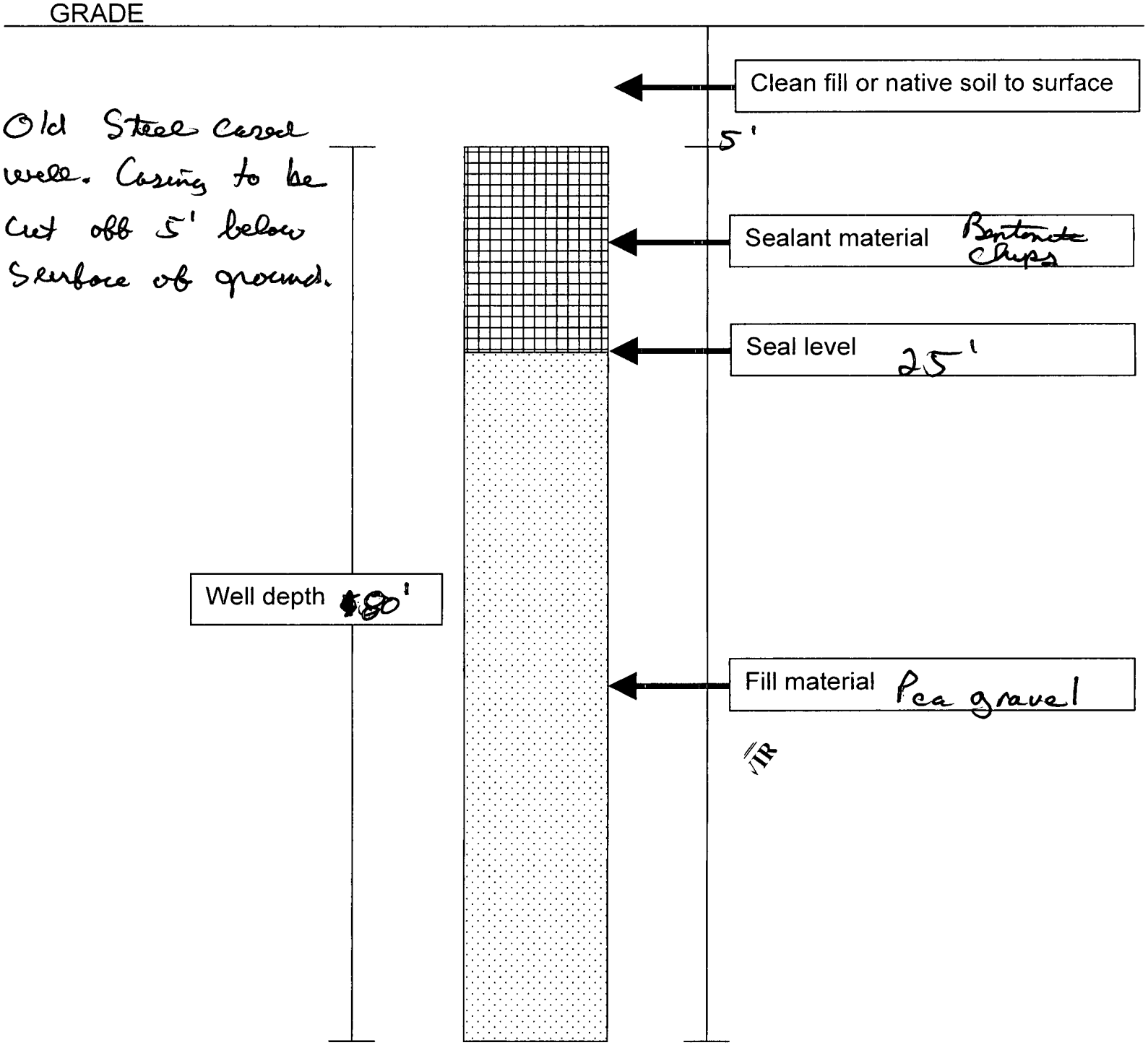
P.O. Box 1546
Grass Valley, CA 95945
Phone (530) 273-8136 FAX (530) 273-1213

WELL DESTRUCTION

Customer: MIMA Capital LLC

Address: 7535 Ridgeview, Penryn

APN: 032-124-042



Check No. 68038
Receipt No. A500052469
Amount 680
Date: 7/25/19
By: MC
Permit No. 9243
Dt. Issued 7-31-19
By: MC
FOR OFFICE USE ONLY

PLAC R COUNTY HEALTH & HUM N SERVICES
ENVIRONMENTAL HEALTH SERVICES

3091 County Center Dr., Ste. 180 , Auburn CA 95603 (530) 745-2300
Tahoe Office: 775 N. Lake Blvd. Ste. 203 (P.O. Box 1909), Tahoe City, CA 96145 (530) 581-6240

PE: 4545 OW: — FA: — WP: 9243

WATER WELL APPLICATION/PERMIT

To Construct, Repair, Reconstruct or Destroy A Water Well

APN 032-124-042 Well Driller: PETERS' DRILLING & PUMP P.O. BOX 1546 GRASS VALLEY, CA 95945 CL# 456136 Type: C-57
MLD# Address: Phone:
Subdivision: Property Owner: Mima Capital LLC
Parcel/Lot# Address: 4120 Douglas Blvd. #306-175 Phone:
Parcel Size 7.0 City: Granite Bay Zip 95746
Zoning**
Job Address/Location 7535 Ridgeview Penryn
Concerns or Comments:

Type of Work: ☑ New Well ☐ Destruction* ☐ Deepening ☐ Modification ☐ Other

Well Use: ☑ Individual ☐ Public ☐ Agricultural ☐ Other

Are there any existing wells on the property? ☐ Yes ☐ No

Are there presently any abandoned wells on the property? ☐ Yes ☒ No

Are alternate drilling sites indicated?*** ☐ Yes ☒ No

Distance to nearest: Septic tank 150'+ Leaching field 150'+ Seepage pit 150'+
Sewer line 100' Property line 50' Other well 67'

An application is complete only when the form is filled out in full, is signed by the licensed well driller and accompanied by the following:

1. A vicinity map and clear written directions to the proposed well site.
2. Copy of assessor's plat.
3. Appropriate permit filing fee.
4. Two(2) copies of an accurate site plan drawn to scale showing property lines, existing wells, sewage systems, sewer lines, animal feed lots, and all other features of potential contamination. Also show location of restrictions, e.g. easements, rights of way, sewer lines.

WORKER'S COMPENSATION DECLARATION

(One of the following must be completed)

☐ 1. A certified copy of Worker's Compensation Insurance is hereby furnished.
☐ 2. A current effective certificate is filed with the County Building Department or Environmental Health Services.
☐ 3. I certify that in performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the Worker's Compensation of California.

I have read and understand the statements, ordinance requirements and permit conditions (located above & on the back of page) and certify that all relevant activities will be performed in compliance with these statements and applicable code. I have shown all easements on the property.

Well Driller's Signature: Jay Murphy Date 7/22/19

DISPOSITION OF APPLICATION
(For Environmental Health Use Only)

Was a variance necessary for this work? ☐ Yes ☑ No

☑ Approved ☐ Denied (Refer to Water Well Permit Denial Notice)

Conditions: per plot plan provided

Environmental Health Representative: Date: 7/31/19

* **Complete an Abandoned Well Destruction form and submit with application.**
** **Additional information needed for "Standby Well" use.**
*** **If the location of the actual productive well is different from the primary drilling site, immediately submit a revised plot plan showing the site of the productive well and indicate the holes that have been destroyed.**

Sent 7-31-19 MC

White/File Canary/Driller

ORDINANCE REQUIREMENTS

A. Submission of an incomplete application or omission of required information as outlined will result in a delay in processing your permit. The effective application receipt date will be the date on which all required information is received.

B. The permit can be denied if is found that issuance of the permit is not in the public interest, the application information is false, proposed work is not in compliance with the ordinance, there are abandoned wells on the property and there is no application for destruction, proposed construction prohibits zoned use of adjoining property, or the construction will be detrimental to surrounding property.

C. An application becomes a permit when approved and signed by Environmental Health Services personnel.

D. A permit issued is valid for one (1) year from the date of issuance. All work must be completed within that time. A new permit or permit renewal must be obtained to continue work after the initial permit expires. Permits are non-transferable.

E. Well work performed without a permit can result in a penalty fee, regulatory action and/or legal action.

F. Well driller must maintain a copy of the drilling permit at the drilling site during all phases of work.

G. Well construction, destruction or modification under a permit is subject to conditions or instructions by Environmental Health Services to carry out the ordinance objectives.

H. Except as otherwise specified, all construction, modification and destruction of wells must be in accordance with the Department of Water Resources Bulletin 74-81 and all of its subsequent supplements or revisions.

I. The well driller must phone Environmental Health Services a minimum of two(2) hours prior to sealing the annular space. At the scheduled inspection the Environmental Health representative will wait 15 minutes for commencement of the seal installation. If the driller fails to present within that time or if the driller is not ready to place the seal, a reinspection fee will be charged before rescheduling the reinspection. The well driller may postpone the seal inspection without a reinspection charge if the driller notifies the Environmental Health at least one(1) hour before the scheduled time. Only one postponement without reinspection charge will be allowed for each inspection request.

H. The state DWR Form 188 must be submitted to Environmental Health Services within 90 days of completion of the work.

PERMIT CONDITIONS

- This permit is non-transferable.
- This permit is valid for one(1) year from date of issue.
- A permit may be renewed only if application is made prior to expiration date.
- Issuance of a permit in no way indicates a guarantee of perfect or indefinite operation of this system.
- The well driller shall notify Environmental Health Services a minimum of 2 hours prior to sealing the well annular space.
- Construction work shall be performed by a licensed C-57 well drilling contractor and in compliance with standards prescribed in the California Department of Water Resources Bulletin 74-81 and all revisions.
- The well shall be located on the property as indicated on the approved plot plan.
- Environmental Health Services may condition this permit in any manner to carry out the purposes of the ordinance.
- Any abandoned wells on the property shall be destroyed in accordance with the standards referenced above.

LIABILITY FOR DAMAGES:

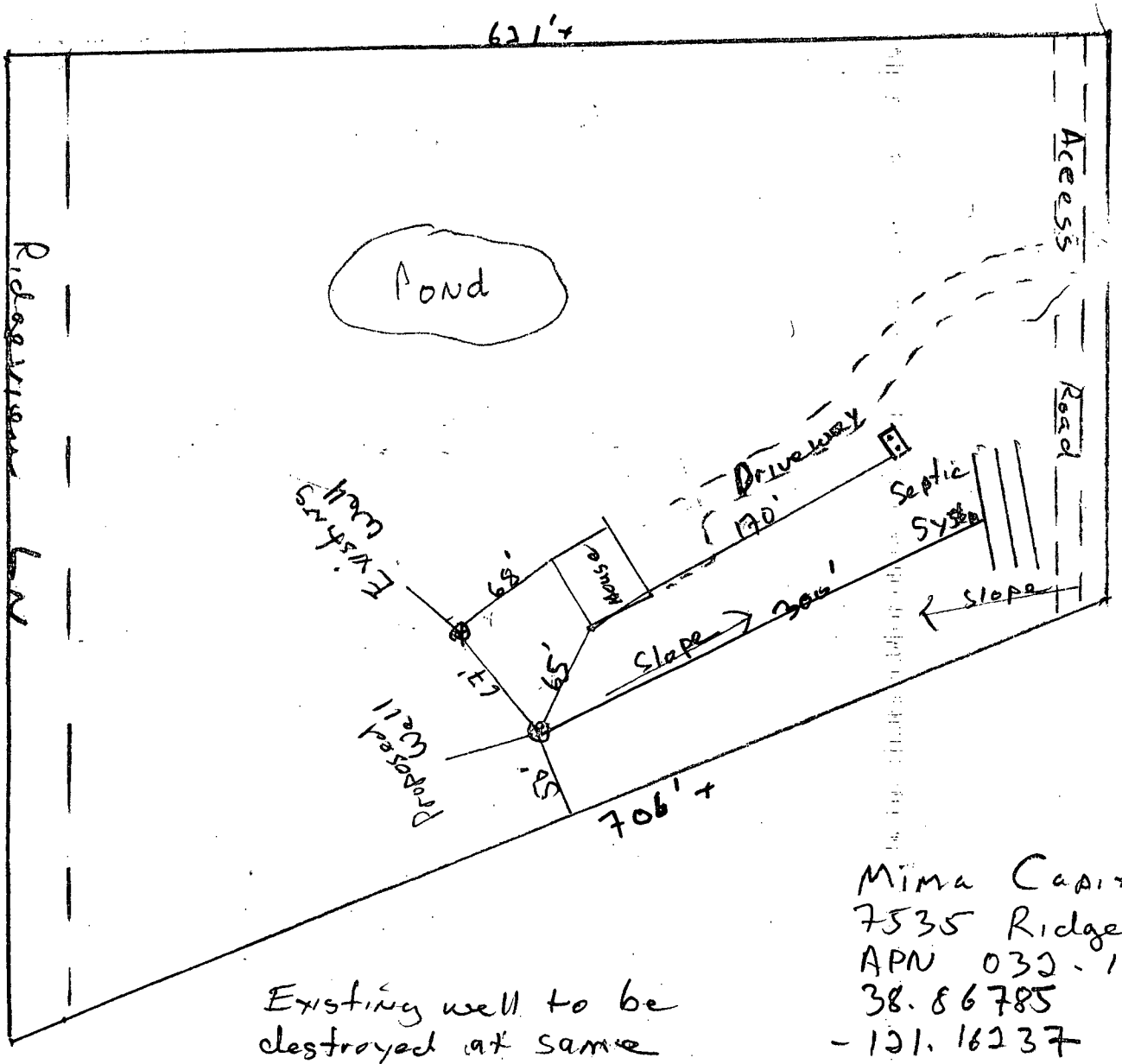
The applicant/permittee shall defend, indemnify, and hold harmless Placer County, and its agents, officers, and employees, from all claims, liability, damages, costs, lawsuits, and judgments for property damage, for personal injury, for construction costs or claims which may arise out or be alleged to relate to applicant's/permittee's work performed under a permit. The applicant's/permittee's obligations hereunder shall include the defense and indemnification of Placer County from any claim, liability, damages, costs, lawsuits, or judgments as asserted by any third party, expressly including any party under contract with applicant/permittee to perform any of the work under this application/permit.

PETERS' DRILLING & PUMP SERVICE

www.petersdrilling.com
State License No. 456136

New Well
PLACER COUNTY
ENVIRONMENTAL HEALTH
SERVICES
PLANS APPROVED
WP 9243 7/31/19
Permit # Date
Signature

P.O. Box 1546
1005 Idaho Maryland Road
Grass Valley, CA 95945
Phone: (530) 273-8136
(530) 888-7311
Fax: (530) 273-1213





Mima Capitol LLC
7535 Ridge View
APN 039-124-042
38.86785
-121.16237

Existing well to be destroyed at same time new well is sealed

access is driveway before Ridgeview - It will be flagged

SIRE CAPTURE SEPARATOR PAGE

VALUE: PAGESEPARATOR

Cabinet to File in	APN (no dashes, 12 characters)	Permit Type	Permit Number	Doc Type
ENV	032124042000	4200	032124042000	31
		Historical Septic & Well Permits		ENV - Historical

File Name

ENV;032124042000;4200;032124042000;31

APN#

CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS
4/13/04		Set conditions for TOE 037. Usage statement, stated that they would use well water for participants. Set condition that either submit bact to EHS for approval prior to event or provide bottled H_2O for participants.		CM
4/14/04		Left message w/ event coordinator of special condition on water		CM
4/5/05		Received FYI for temporary event from Planning. ~~Fee~~ Planning will not require any permit. Spoke w/ event planner, she will be in to take out Non-profit Temp Event Application for CPT. Bottled H_2O provided to participants.		CM

Revised 1/95
ref:f:forms\contactshe

Pet Play Day
Incorporated
P.O. Box 704
Penryn CA 95663
Phone: (916) 663-2841
Fax: (916) 663-2845
www.PetPlayDay.org

RECEIVED
MAR 14 2005
PLANNING DEPT.

Home To

Sacramento PIT GAZETTE
A MONTHLY PUBLICATION FOR THE RESPONSIBLE PET OWNER

Bow Wow Bash
A Day of Fun Canine Games

ANIMAL OCTOBER FEST

Please Deliver To

Name: Placer County Planning

Company:

Number of Pages Including Cover: 1 2 3 4 (5) 6 7 8 9 10 >___

Ø PEA724
SR-31163

Message:

To Whom It May Concern:

following is or application for a temporary outdoor event permit. Please let me know it yw need any more information, or if there are any problems with this fax transmission.

Thank yw!

Johnita Wemken

RECEIVED
APR 01 2005
PLACER COUNTY
ENV HEALTH

NO FORMAL PERMIT ANTICIPATED
PER FRED YEAGER

CC: SHERIFF
DPW
EH

PLACER COUNTY PLANNING DEPARTMENT

AUBURN OFFICE
11414 B Avenue
Auburn, CA 95603
530-886-3000/FAX 530-886-3080

TAHOE OFFICE
565 W. Lake Blvd./P. O. Box 1909
Tahoe City CA 96145
530-581-6280 /FAX 530-581-6282

Web page: www.placer.ca.gov/planning Email : planning@placer.ca.gov

Reserved for Clerk's Stamp

APPLICATION FOR TEMPORARY OUTDOOR EVENT PERMIT

—Office Use Only—

Receipt No. N/A Zoning _____ Date Received: _____

Filing Fee N/A File # _____ Fee Waived (non-profit): _____

Application must be filed 60 days prior to the proposed event and submitted to the Planning Department. The application must be accompanied by a written discussion of the items listed in Section 5.152(a)-(g) of the Placer County Code (located on the reverse side of this application.) Submit completed application, appropriate application fee, and supplemental information to the Planning Department office, 11414 B Avenue, Auburn, CA 95603.

TO BE COMPLETED BY THE APPLICANT

1. Name-Business/Event: Hannah Bai-Wan Bash
2. Property Owner: Stacey Kettle
   Mailing Address: 16 Slope Oaks Ct, Paradise 530-877-0849 (Telephone Number) N/A (Fax Number)
3. Sponsor/Promoter: Johnita Wenken
   Mailing Address: PO Box 704, Penryn CA 95663 663-2841 (Telephone Number) 663-2845 (Fax Number)
   If a partnership, list all general partners N/A
4. Name if Non-Profit Group and Identification No.: Pet Play Day, Inc, ID # 75-3004220
5. Location/Day/Time of Event: 7535 Rideview lane, Penryn May 21st 11am-4pm
6. Description of Event: Canine Games-agility, costume contest, raffle, prizes
7. Assessor's Parcel Number: 032-121-077 Parcel Size: 7 acres

EVENT IS EXEMPT FROM PERMIT REQUIREMENTS _____

SCHEDULED FOR AGENDA _____ APPROVED _____ DENIED _____

APPROVAL SUBJECT TO ATTACHED CONDITIONS: YES ____ NO ____

FOR DEPARTMENT USE ONLY

Application routed to the following departments/agencies for comment. Comments due _____

Date	Dept./Agency	Attached	Date	Dept./Agency	Attached	Date	Dept./Agency	Attached
____	Emergency Svcs	____	____	Public Works	____	____	Health	____
____	Planning	____	____	Building	____	____	Fire	____
____	Parks	____	____	CDF	____	____	Sheriff	____

I declare under penalty of perjury that the foregoing statements are true and correct.

Stacey Kettle 3/12/05

Signature of Property Owner Date

3) Sanitation Facilities: Portable sanitary facilities will be rented and on-site for event participants to use, including 2 porta-potties (one will be an ADA approved), hand sanitizer, and a sink with running potable water.
4) Medical Facilities: Phone lines will be readily available in the case of any emergency. As well we will have a licensed nurse on site as well as basic first-aid supplies.
5) Fire Protection: We will have two fire extinguishers on-site as well as multiple water hoses. Event staff and volunteers will be trained as to their locations and use, as well as protocol in the event of an emergency.
6) Parking: Parking will be in a secured open pasture, separate from the main event area. Volunteers will be on-site throughout the event to direct cars into proper parking lanes, to be certain to keep emergency lanes and exits clear.
7) Traffic Control: Traffic will flow in and out of the event parking on a two lane road. Once to the parking area cars will be directed by event staff and volunteers as to where to park their cars. Entrance and Exit signs will be CLEARLY marked to assist in the flow of traffic. Cars will enter and exit through separate gates.
8) Clean-up: Rubbish receptacles will be available throughout the event site. All trash and recyclables will be placed into said containers. Throughout the event volunteers will removal full receptacle bags. Trash bags will be temporarily placed into an enclosed trailer and then promptly taken to the landfill, after the event.

F) Alcohol & Drugs

No alcohol or drugs will be permitted at the Bow-Wow Bash. Signs will be posted at the event entrance indicating this, and throughout the event staff and volunteers will be on the lookout for alcohol policy violators. Violators will be asked to remove their alcohol from the event site immediately, and in some cases could be asked to leave.

G) Noise Level

The only noise generated from the event will be the occasional use of a microphone to make short announcements, and soft background music played from a small home stereo.

If you have any other questions please do not hesitate to call me at (916) 663-2841.

Respectfully Submitted By:

Johnita Wemken
Founder & Director
Pet Play Day, Inc.

Application For Temporary Outdoor Event Permit
For the Bow-Wow Bash
Hosted by Pet Play Day, Inc.
Federal Tax ID #75-3004220

A) Applicant

Name of Applicant:
Pet Play Day, Inc.
c/o Johnita Wemken
Mailing Address:
P.O. Box 704
Penryn CA 95663
Street Address:
7535 Ridgeview Lane
Penryn CA 95663

B) Scaled Site Plan

See attached document

C) Event Date & Hours

Bow-Wow Bash
Saturday, May 21, 2005
11 AM to 4 PM

D) Estimated Attendance

Participants: 150
Volunteers: 25-35
Total Attendance: 175

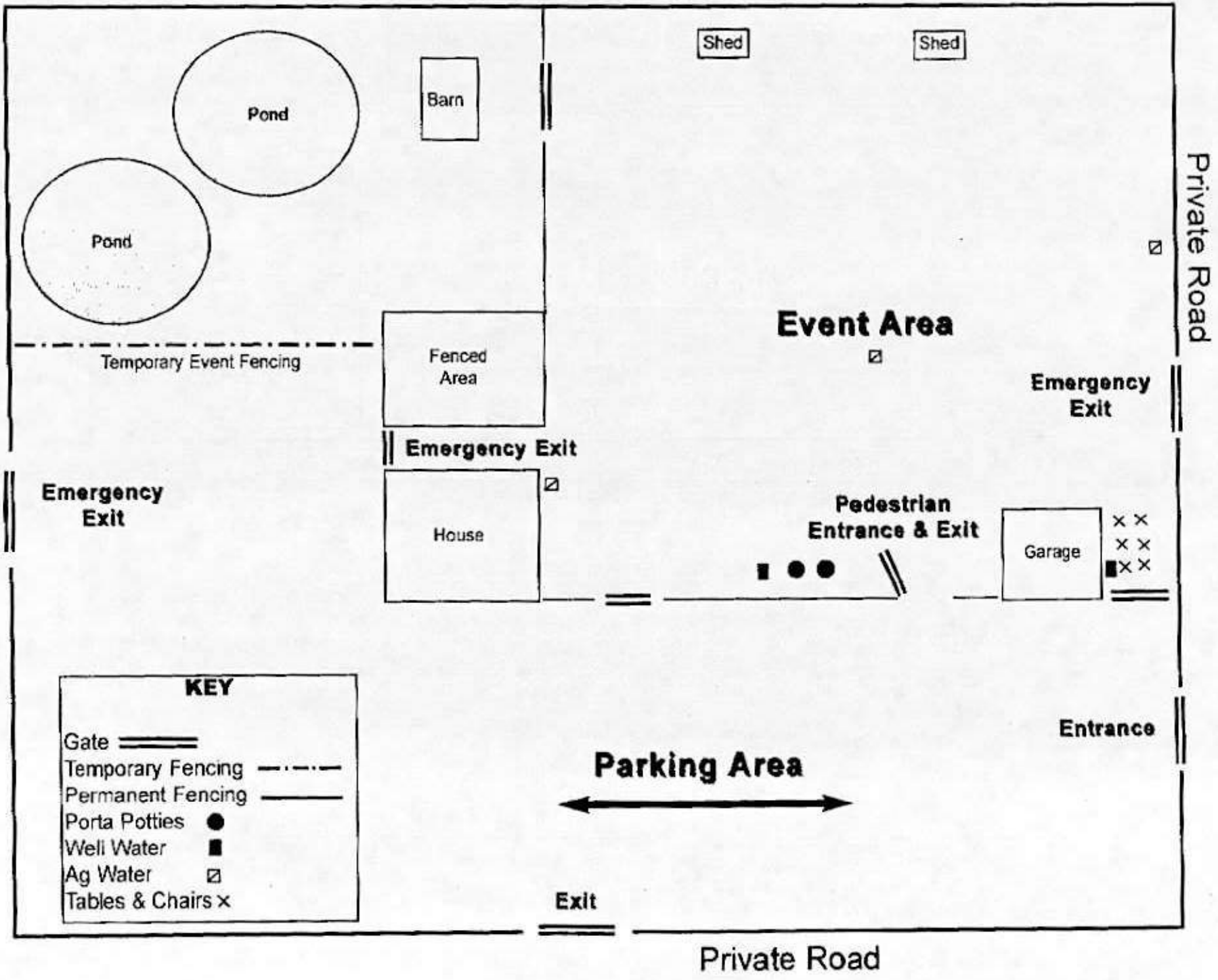
E) Detailed Explanation of Program and Activities

The Bow-Wow Bash is a fundraiser for Pet Play Day, Inc. the 501(c)(3) tax-exempt non-profit organization that publishes the Sacramento Pet Gazette. The Bow-Wow Bash will include canine games such as bobbing for hot dogs, agility, flyball, tricks for treats, and a costume contest. Also available will be on-site microchipping made possible by the Friends of Placer County Animal Services. At the end of the canine games there will be an awards ceremony. Snacks and beverages will be available throughout the day.

1) Security: The Bow-Wow Bash will use more than 20 volunteers to monitor event participants safety and security. Pet Play Day, Inc. staff will meet with the volunteers prior to the event to go over safety and security policies and procedures as well as emergency protocol. The entire perimeter of the event site is secured by permanent fencing, with the exception of gates which will remain open and will be monitored by event staff.
Water Supply: On-site water will be readily available from several locations. We will have bottled water available for both humans and canines alike.
2) Food Supply: A snack bar will be open during even hours to sell pre-packaged snacks and beverages to event participants.

03/14/2005 14:18 916[illegible]845 WEMKEN & ASSOCIATES PAGE 05

Bow-Wow Bash Site Plan
7535 Ridgeview Lane, Penryn CA 95663



MEMORANDUM

DEPARTMENT OF HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES
11454 "B" Avenue, Auburn, CA 95603
(530) 745-2300

To: Fred Yeager, Planning Department

From: Laura Mattson, E.H.S. LM
Land Use and Water Resources

Date: September 1, 2004

Subject: **TOE 04-0516, ANIMAL OCTOBER FEST, APN # 032-124-042**

Environmental Health Services has the following list of conditions of approval for the aforementioned temporary outdoor event request as proposed:

1. The event shall be limited to the hours of 11:00 am to 4:00 pm on October 17, 2004.

2. Adequate portable toilet facilities shall be provided for the event.

3. Refuse from the event shall be collected on site and stored in waterproof containers. Refuse must be removed from property and disposed of properly within 7 days of the event.

4. Submit a Non-Profit Annual Fundraising Event Application to Environmental Health Services Consumer Protection Section. All food handling operations shall comply with the requirements of Placer County Code and the California Uniform Retail Food Facility Law.

5. Bottled water shall be provided to event participants. Use of well water is prohibited, unless acceptable bacteriological analysis dated within the last year is submitted to Environmental Health Services for review and approval prior to the event.

LM/gf

c: Applicant
file

ref: d:\mattson\toe04-0516

MEMORANDUM

PLANNING DEPARTMENT
COUNTY OF PLACER

TO: SHERIFFS, DPW & EH

FROM: PLANNING

DATE: AUGUST 26, 2004

SUBJECT: TEMPORARY OUTDOOR EVENT (PTOET20040516) - ANIMAL OCTOBER FEST

Attached is an application we received in our department for a Temporary Outdoor Event to be held on Sunday, October 17, 2004 from 11:00 AM to 4:00 PM at 7535 Ridgeview Lane in Penryn.

Please respond by **September 13, 2004** with any comments or concerns.

RECEIVED
AUG 30 2004
PLACER COUNTY
ENV HEALTH

PLACER COUNTY PLANNING DEPARTMENT

AUBURN OFFICE
11414 B Avenue
Auburn, CA 95603
530-886-3000/FAX 530-886-3080

TAHOE OFFICE
565 W. Lake Blvd./P. O. Box 1909
Tahoe City CA 96145
530-581-6280 /FAX 530-581-6282

Web page: www.placer.ca.gov/planning Email : planning@placer.ca.gov

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AUG 13 2004
PLANNING DEPT

FEE Rec#2729 Init# 889771

APPLICATION FOR TEMPORARY OUTDOOR EVENT PERMIT

SOUTH TEAM

—Office Use Only—

Receipt No. N/A Zoning RS Date Received: 08-13-04

Filing Fee N/A File # PTOET20040516 Fee Waived (non-profit): FED TAX ID# 75-3004220

Application must be filed 60 days prior to the proposed event and submitted to the Planning Department. The application must be accompanied by a written discussion of the items listed in Section 5.102(a)-(g) of the Placer County Code (located on the reverse side of this application.) Submit completed application, appropriate application fee, and supplemental information to the Planning Department office, 11414 B Avenue, Auburn, CA 95603.

TO BE COMPLETED BY THE APPLICANT

1. Name-Business Event: Animal October Fest
2. Property Owner: Stacey Kettle
   Mailing Address: 16 Slope Oaks Ct, Paradise 530-877-0814 N/A
   Telephone Number Fax Number
3. Sponsor/Promoter: Johnita Wenker
   Mailing Address: PO Box 704, Penryn, CA 95663 663-2841 663-2845
   Telephone Number Fax Number
   If a partnership, list all general partners N/A
4. Name if Non-Profit Group and Identification No.: Pet Play Day, Inc, ID # 75-3004220
5. Location/Day/Time of Event: 7535 Ridgeview Lane, Penryn October 17th 10am-4pm
6. Description of Event: Animal Blessing Ceremony, costume contest
7. Assessor's Parcel Number: 032-220-020 (032-220-026 DPN) Parcel Size: 7 acres

EVENT IS EXEMPT FROM PERMIT REQUIREMENTS _____
SCHEDULED FOR AGENDA _____ APPROVED _____ DENIED _____
APPROVAL SUBJECT TO ATTACHED CONDITIONS: YES ____ NO ____

FOR DEPARTMENT USE ONLY

Application routed to the following departments/agencies for comment. Comments due _____

Date	Dept./Agency	Attached	Date	Dept./Agency	Attached	Date	Dept./Agency	Attached
____	Emergency Svcs	____	____	Public Works	____	____	Health	____
____	Planning	____	____	Building	____	____	Fire	____
____	Parks	____	____	CDF	____	____	Sheriff	____

I declare under penalty of perjury that the foregoing statements are true and correct.

Stacey Kettle 8/12/04
Signature of Property Owner Date

RECEIVED
AUG 30 2004
PLACER COUNTY ENV HEALTH

Pet Play Day, Inc.
Promoting Responsible Pet Ownership
P.O. Box 704
Penryn, CA 95663
Phone: 916/663-2841
Fax: 916/663-2845
www.PetGazette.org
www.BowWowBash.com

Home To

PET GAZETTE
A MONTHLY PUBLICATION FOR THE RESPONSIBLE PET OWNER

ANIMAL OCTOBER FEST

BOW-WOW BASH
A Day of Fun Canine Games

Please Deliver To:

Name: To Whom It May Concern

Company: Placer County Planning

Number of Pages Including Cover: 1 2 3 4 5 6 7 8 9 10 >__

Message:

To Whom It May Concern:

Following is our application for a temporary outdoor event permit for our Animal October Fest, scheduled for Sunday, Oct 17th 2004, 11Am-4pm at 7535 Ridgeview Lane in Penryn. Please do not hesitate to contact me at (916) 663-2841 or via email at editor@petgazette.org if you have any questions or need any further info

Respectfully,
Juanita Wenken

RECEIVED
AUG 13 2004
PLANNING DEPT.

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AUG 13 2004
PLANNING DEPT.

Application For Temporary Outdoor Event Permit
For the Animal October Fest featuring the "Blessing of the Animals"
Hosted by Pet Play Day, Inc.
Federal Tax ID #75-3004220

RECEIVED
AUG 13 2004
PLANNING DEPT.

A) Applicant

Name of Applicant:
Pet Play Day, Inc.
c/o Johnita Wemken
Mailing Address:
P.O. Box 704
Penryn CA 95663
Street Address:
7285 Quarry Lane
Penryn CA 95663

B) Scaled Site Plan

See attached document

C) Event Date & Hours

Animal October Fest
Sunday, October 17, 2004
11 AM to 4 PM

D) Estimated Attendance

Participants: 75-100
Volunteers: 25-35
Total Attendance: 100-135

E) Detailed Explanation of Program and Activities

The Animal October Fest is both an inspirational community event as well as a fund raiser for Pet Play Day, Inc. the 501(c)(3) tax-exempt non-profit organization that publishes the Sacramento *Pet Gazette*. The Animal October Fest will include a "Blessing of the Animals" ceremony, a costume contest, canine games such as bobbing for hot dogs, tricks for treats, children's face painting, and a pumpkin patch. Also available will be on-site microchipping made possible by the Friends of Placer County Animal Services. Snacks and beverages will be available throughout the day.

1) Security: The Animal October Fest will use more than 20 volunteers to monitor event participants safety and security. Pet Play Day, Inc. staff will meet with the volunteers prior to the event to go over safety and security policies and procedures as well as emergency protocol. The entire perimeter of the event site is secured by permanent fencing, with the exception of gates which will remain open and will be monitored by event staff.
2) Water Supply: On-site water will be readily available from several locations. We will have bottled water available for both humans and canines alike.
3) Food Supply: A snack bar will be open during even hours to sell pre-packaged snacks and beverages to event participants.

4) Sanitation Facilities: Portable sanitary facilities will be rented and on-site for event participants to use, including 2 porta-potties (one will be an ADA approved), hand sanitizer, and a sink with running potable water.
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G) Noise Level

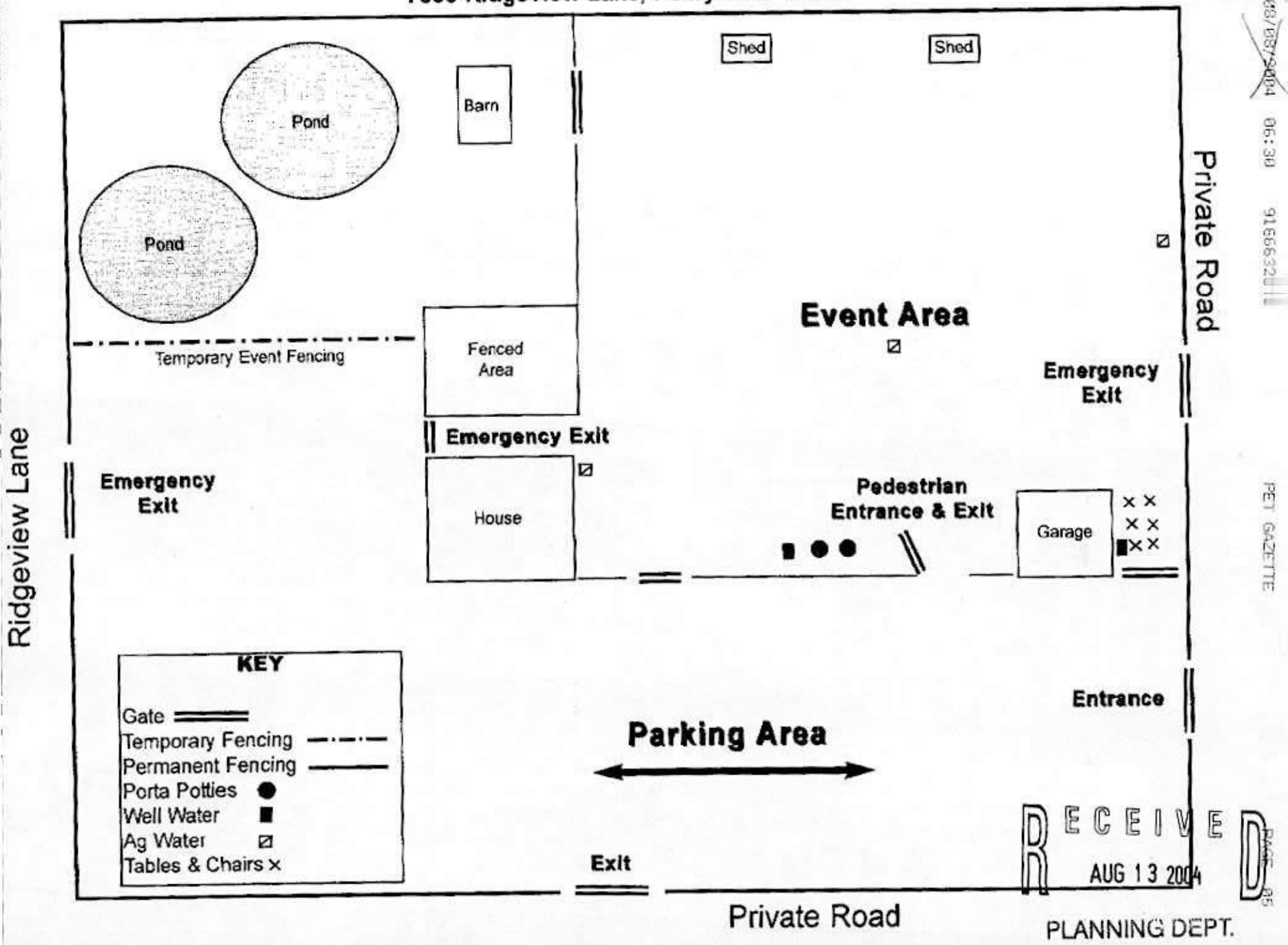
The only noise generated from the event will be the occasional use of a microphone to make short announcements, and soft background music played from a small home stereo.

If you have any other questions please do not hesitate to call me at (916) 663-2841.

Respectfully Submitted By:

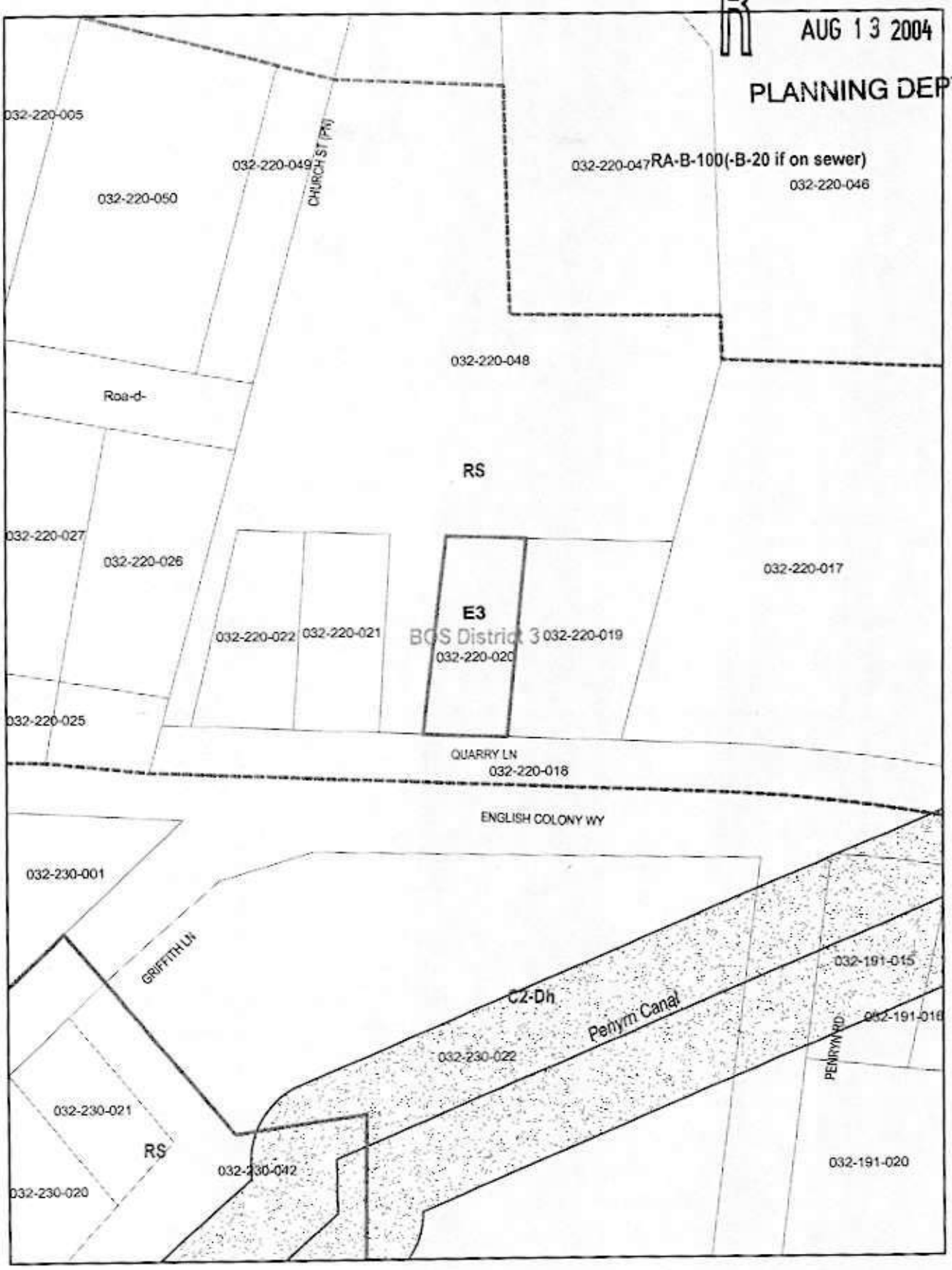
Johnita Wemken
Founder & Director
Pet Play Day, Inc.

Animal October Fest Site Plan
7535 Ridgeview Lane, Penryn CA 95663



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AUG 13 2004
PLANNING DEPT.

RECEIVED
AUG 13 2004
PLANNING DEPT.



MEMORANDUM

DEPARTMENT OF HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES
11454 "B" Avenue, Auburn, CA 95603
(530) 745-2300

To: Fred Yeager, Planning Department

From: Laura Mattson, E.H.S. LM
Land Use and Water Resources

Date: April 14, 2004

Subject: **TOE 037, BOW WOW BASH, APN # 032-124-042**

Environmental Health Services has the following list of conditions of approval for the aforementioned temporary outdoor event request as proposed:

1. The event shall be limited to the hours of 11:00 am to 4:00 pm on May 22, 2004.

2. Adequate portable toilet facilities shall be provided for the event.

3. Refuse from the event shall be collected on site and stored in waterproof containers. Refuse must be removed from property and disposed of properly within 7 days of the event.

4. Submit a Non-Profit Annual Fundraising Event Application to Environmental Health Services Consumer Protection Section. All food handling operations shall comply with the requirements of Placer County Code and the California Uniform Retail Food Facility Law.

5. Bottled water shall be provided to event participants. Use of well water is prohibited, unless acceptable bacteriological analysis dated within the last year is submitted to Environmental Health Services for review and approval prior to the event.

LM/gf

c: Applicant
file

ref: d:\mattson\toe037

4/19/04 Emailed 4:23 pm

MEMORANDUM

PLANNING DEPARTMENT
COUNTY OF PLACER

TO: Dept Public Works
Environmental Health Department
Sheriff's Department

RECEIVED
MAR 2 9 2004
PLACER COUNTY
ENV. HEALTH

FROM: Fred Yeager, Planning Director

DATE: March 25, 2004

RE: **TOE- 037** May 22nd - **032-124-042** Bow Wow Bash

Attached please find the application and information given for a Temporary Outdoor Event application.

Please review the following and send any comments back to me via memo or email no later than **April 23rd, 2004.**

Please feel free to call should you have any questions.

/attachment

PLACER COUNTY PLANNING DEPARTMENT

AUBURN OFFICE
11414 B Avenue
Auburn, CA 95603
530-886-3000/FAX 530-889-7499
Web page: www.placer.ca.gov/planning Email: planning@placer.ca.gov

TAHOE OFFICE
565 W. Lake Blvd./P. O. Box 1909
Tahoe City CA 96145
530-581-6213 /FAX 530-581-6282

TOE-037

APPLICATION FOR TEMPORARY OUTDOOR EVENT PERMIT

HQ PC# 3224/ SCH# 2004036016

—Office Use Only—
Receipt No. _____ Zoning _____
Filing Fee _____ File # _____ Date Received: _____
Fee Waived (non-profit): _____

Application must be filed 60 days prior to the proposed event and submitted to the Planning Department. The application must be accompanied by a written discussion of the items listed in Section 5.102(a)-(g) of the Placer County Code (located on the reverse side of this application.) Submit completed application, appropriate application fee, and supplemental information to the Planning Department office, 11414 B Avenue, Auburn, CA 95603.

TO BE COMPLETED BY THE APPLICANT

1. Name/Business Event: Bow-Wow Bash 032-124-07 Rema
2. Property Owner: Stacey Kettle
   Mailing Address: 11e Slope Oaks Ct, Paradise 530-877-0849 N/A (Telephone Number / Fax Number)
3. Sponsor/Promoter: Johnita Wenskon
   Mailing Address: PO Box 701 Penryn CA 95663 (916)663-2841 (916)663-2845 (Telephone Number / Fax Number)
   If a partnership, list all general partners N/A
4. Name if Non-Profit Group and Identification No.: Pet Play Day, Inc. ID# 75-3004220
5. Location/Day/Time of Event: 7535 Ridgeview Lane Penryn May 22nd, 11am to 4pm
6. Description of Event: BBQ, Mutt strutting, agility demos, costume contests
7. Assessor's Parcel Number: _____ Parcel Size: 7 acres

EVENT IS EXEMPT FROM PERMIT REQUIREMENTS _____
SCHEDULED FOR AGENDA _____ APPROVED _____ DENIED _____
APPROVAL SUBJECT TO ATTACHED CONDITIONS: YES ____ NO ____

FOR DEPARTMENT USE ONLY

Application routed to the following departments/agencies for comment. Comments due _____

Date	Dept/Agency	Attached	Date	Dept/Agency	Attached	Date	Dept/Agency	Attached
____	Emergency Svcs	____	____	Public Works	____	____	Health	____
____	Planning	____	____	Building	____	____	Fire	____
____	Parks	____	____	CDF	____	____	Sheriff	____

I declare under penalty of perjury that the foregoing statements are true and correct.

Stacey Kettle 3-19-04
Signature of Property Owner Date

I:\CMD\CMD\Applications & Brochures\Planning\Temporary Outdoor Event.DOC
Rev 1/03

RECEIVED
MAR 29 2004
PLACER COUNTY
ENV. HEALTH

032-124-04

Pet Play Day, Inc.
Promoting Responsible Pet Ownership
P.O. Box 704
Penryn, CA 95663
Phone: 916/663-2841
Fax: 916/663-2845
www.PetGazette.org

Home To

PET GAZETTE — A MONTHLY PUBLICATION FOR THE RESPONSIBLE PET OWNER

ANIMAL OCTOBER FEST

Bow-Wow Bash — A Day of Fun Canine Games

RECEIVED
MAR 22 2004
PLANNING DEPT.

Please Deliver To:

Name: To Whom It May Concern

Company: Placer County Planning

Number of Pages Including Cover: 1 2 3 4 5 (6) 7 8 9 10 >__

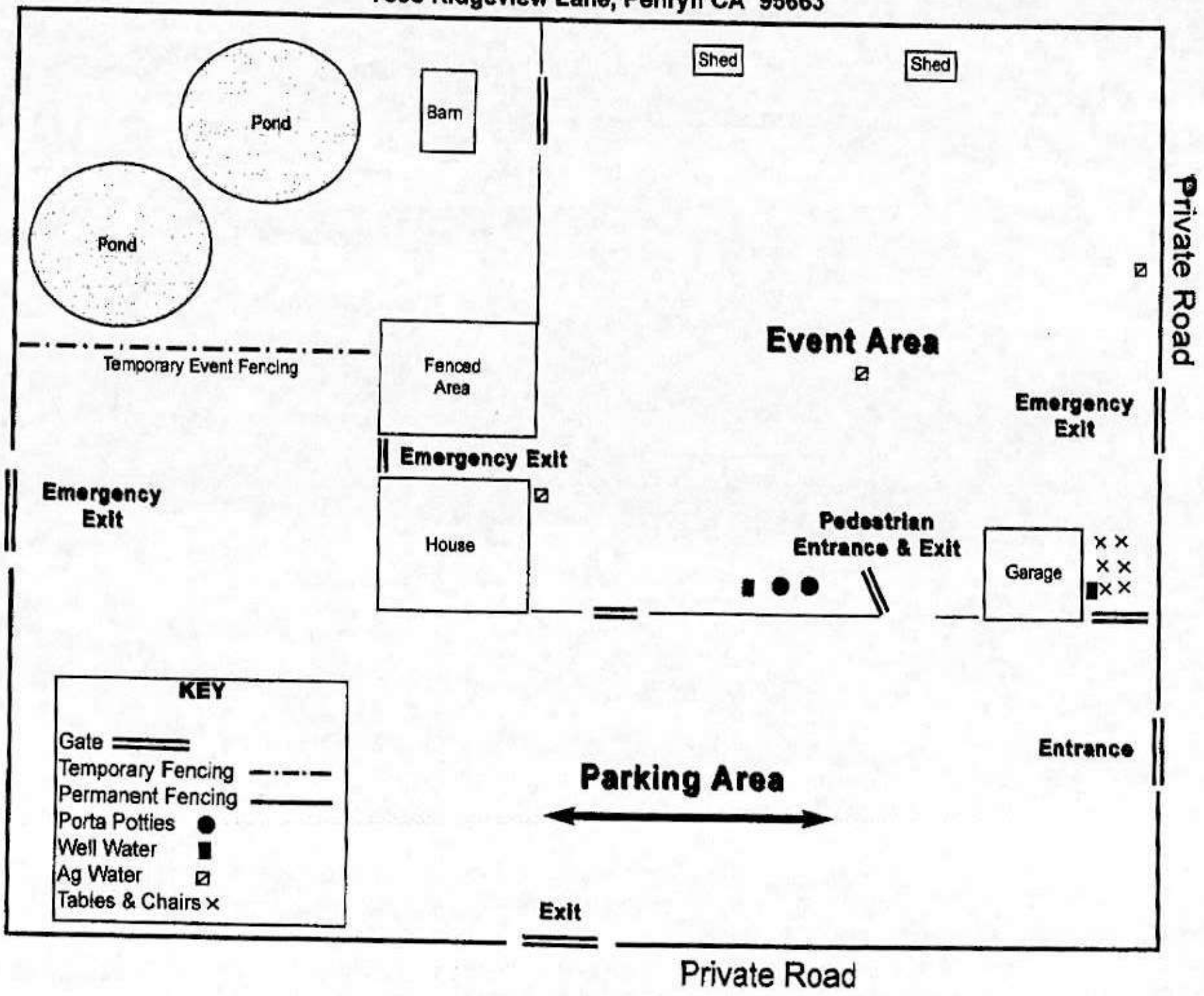
Message: TOE-037

Following is an application for a temporary outdoor event permit for an Bow-Wow Bash fundraiser. If you have any questions or need more information please call me at (916) 663-2841. Thank you for your help and consideration on this important matter.

Respectfully,
Johnita Wenken
Funder & Director

03/22/2004 11:58 9166632B4 PET GAZETTE PAGE 03

Bow-Wow Bash Site Plan
7535 Ridgeview Lane, Penryn CA 95663



Application For Temporary Outdoor Event Permit
For the Bow-Wow Bash
Hosted by Pet Play Day, Inc.
Federal Tax ID #75-3004220

A) Applicant

Name of Applicant:
Pet Play Day, Inc.
c/o Johnita Wemken
Mailing Address:
P.O. Box 704
Penryn CA 95663
Street Address:
7535 Ridgeview Lane
Penryn CA 95663

B) Scaled Site Plan

See attached document

C) Event Date & Hours

Bow-Wow Bash
Saturday, May 22, 2004
11 AM to 4 PM

D) Estimated Attendance

Participants: 75-100
Volunteers: 25-35
Total Attendance: 100-135

E) Detailed Explanation of Program and Activities

The Bow-Wow Bash is a fundraiser for Pet Play Day, Inc. the 501(c)(3) tax-exempt non-profit organization that publishes the Sacramento Pet Gazette. The Bow-Wow Bash will include canine games such as bobbing for hot dogs, agility, flyball, tricks for treats, and a costume contest. Also available will be on-site microchipping made possible by the Friends of Placer County Animal Services. At the end of the canine games there will be an awards ceremony. Snacks and beverages will be available throughout the day.

1) Security: The Bow-Wow Bash will use more than 20 volunteers to monitor event participants safety and security. Pet Play Day, Inc. staff will meet with the volunteers prior to the event to go over safety and security policies and procedures as well as emergency protocol. The entire perimeter of the event site is secured by permanent fencing, with the exception of gates which will remain open and will be monitored by event staff.
2) Water Supply: On-site water will be readily available from several locations. We will have an outdoor sink with well water and single-use disposable cups available for both humans and canines alike. For those who prefer, bottled water will be available for sale.

3) Food Supply: A snack bar will be open during even hours to sell pre-packaged snacks and beverages to event participants.
4) Sanitation Facilities: Portable sanitary facilities will be rented and on-site for event participants to use, including 2 porta-potties (one will be an ADA approved), hand sanitizer, and a sink with running potable water.
5) Medical Facilities: Phone lines will be readily available in the case of any emergency. As well we will have a licensed nurse on site as well as basic first-aid supplies.
6) Fire Protection: We will have two fire extinguishers on-site as well as multiple water hoses. Event staff and volunteers will be trained as to their locations and use, as well as protocol in the event of an emergency.
7) Parking: Parking will be in a secured open pasture, separate from the main event area. Volunteers will be on-site throughout the event to direct cars into proper parking lanes, to be certain to keep emergency lanes and exits clear.
8) Traffic Control: Traffic will flow in and out of the event parking on a two lane road. Once to the parking area cars will be directed by event staff and volunteers as to where to park their cars. Entrance and Exit signs will be CLEARLY marked to assist in the flow of traffic. Cars will enter and exit through separate gates.
9) Clean-up: Rubbish receptacles will be available throughout the event site. All trash and recyclables will be placed into said containers. Throughout the event volunteers will removal full receptacle bags. Trash bags will be temporarily placed into an enclosed trailer and then promptly taken to the landfill, after the event.

F) Alcohol & Drugs

No alcohol or drugs will be permitted at the Bow-Wow Bash. Signs will be posted at the event entrance indicating this, and throughout the event staff and volunteers will be on the lookout for alcohol policy violators. Violators will be asked to remove their alcohol from the event site immediately, and in some cases could be asked to leave.

G) Noise Level

The only noise generated from the event will be the occasional use of a microphone to make short announcements, and soft background music played from a small home stereo.

If you have any other questions please do not hesitate to call me at (916) 663-2841.

Respectfully Submitted By:

Johnita Wemken
Founder & Director
Pet Play Day, Inc.

SR 2475

Firm	Kandy's Canine Country Club	Status	Pending
Firm (Add'l)	Loc. O H	Acct No	94688
Street	7535 Ridgeview Lane	License	94688
City	Penryn CA 95663-0000	Phone	(916) 663-3196
Mail Addr	7535 Ridgeview Lane	Start Date	02/01/2004
Mail City	Penryn CA 95663-0000	Close Date	
Ownership	Sole Proprietorship	Rate Type	General Business License

Owner 1	Wemken, Kandy		
Owner 2			
License Issued	03/19/2004	Application	New Application
License Expires	02/01/2005	Renewal	Annually
NAIC Code	0000 - Undefined		
SIC Code	0000000 - Undefined		
Bus Type	0171 - Dog Kennels		
APN	032-121-077-000		
BEAN			

7/20/04 L.M for Kandy to call as we need usage statement for RCFD Review.

7/20/04 MUP needed

ADDITIONAL INFORMATION

Fax Number		E-Mail	hugsnpets.com
State Lic No		Type	Expires
NAIC Code	0000 - Undefined		
SIC Code	0000000 - Undefined		
Bus Type	0171 - Dog Kennels		
Import/Export	None	Mailing List	Yes
		Special Cond	No
APN	032-121-077-000		
BEAN			

DEPARTMENT APPROVALS

Dept Approvals Apply

	Department	Date	By
Zoning at Location	Building		NA
Building	Fire		NA
Planning/CUP	Health		
Health	Planning		
DPW	Public Works		
Denial Date			

PLACER COUNTY INTER-DEPARTMENT
HOME BUSINESS LICENSE QUESTIONNAIRE

WELCOME TO PLACER COUNTY

APPLICANT NAME:
Kandy Wemken BL#94688

BUSINESS NAME AND ADDRESS:
Kandy's Canine Country Clu b 7535 Ridgeview Lane, Penryn, CA 95663

ASSESSOR PARCEL NUMBER:
???

In order to assist you in the process of your application, please give a detailed description of the type of business and equipment you will be operating in Placer County, providing details of business activities. Please write legibly, being very specific in your description. You may attach additional pages if needed.

Dog boarding fro a maximum of six dogs

1. How many occupants of the residence will be involved in the proposed business? 2
2. How many non-occupant employees will be involved in the proposed business that report to the home site? 0
3. How many home occupations (not counting this business) are currently run out of the home? 0
4. What will be the average number of clients/customers daily? 2-3 per week
5. Describe what rooms or buildings will be used in the conduct of the business and how these areas will be used. out buildings w/concrete floors
6. Where will supplies/equipment be stored? in enclosed Rubbermaid storage bins in the outbuildigs.
7. Describe the mechanical/electrical equipment or tools that will be used in connection with the business and where they will be stored on the premises. none
8. Will you be placing a sign on the property to advertise the business? Yes ☐ No ☒
9. Will trucks, trailers, or other equipment be used in your business? Yes ☐ No ☒ If yes,
   a. What is the vehicle type?
   b. How many vehicles?
   c. Does the vehicle exceed 1 ton carrying capacity? Yes ☐ No ☐
   d. Address of storage location when not in use.
10. Will this "Home Occupation" involve the use of commercial vehicles for the delivery of materials to or from the premises? Yes ☐ No ☒ If yes, please explain and include the frequency of deliveries or pick-ups.
11. Is this an existing business that is relocating? Yes ☐ No ☒ If yes,
    a. Provide the previous street address, city and state.
    b. Provide the business name if different from this application.

12. What type of sewage disposal system services the property? Public Sewer ☐ On Site Disposal System ☒

13. Would anything other than normal domestic wastewater be entering the septic or public sewer system? Yes ☐ No ☐ If yes, please explain what type of substance or material it will be.

14. What is the property's water source? Private Drilled Well ☒ Small Public Water System ☐ Ditch Water ☐ Public Treated Water (Give Water Agency Name)

15. What are the days and hours of operation of the business? Sunday - Saturday

16. Does the business involve any food or liquor products? Yes ☐ No ☒ If yes, provide the type of food or liquor product name.

Hazardous Material Questionnaire

A hazardous material/waste includes, but is not limited to, acids, gasoline, propane, pesticides, weed killers, paints, paint thinner used oil, welding gases, poisons, water reactive chemicals, fertilizers, flammable liquid's and solids, explosives, and industrial cleaners. If you or your business will be handling or storing hazardous material/waste, provide the name of the material/waste below. Verify the quantity amount in pounds, cubic feet, or gallons.

Name of material/waste	**Quantity amount**
none	

I understand that the questions I have answered on this questionnaire have been completed in their entirety. I understand that any missing or misleading information may result in the delay, denial, or revocation of this "Home Occupation" business license per Placer County Code Section 5.385.

Signature of Applicant _____ **Date** _____

AP# _____ MLD# _____ SUB. _____

CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS
5/25/17	WP8796	Well permit review &		
		processing.	HR	
5/30/17	WP8796	Well Seal	HR	

Placer County Health & Human Services
ENVIRONMENTAL HEALTH SERVICES
3091 County Center Dr,
Suite 180 ,
Auburn CA 95603
Phone (530) 745-2300 Fax (530)745-2370

775 North Lake Blvd, Suite 203
Tahoe City, CA 96145
Ph:(530) 581-6240 : Fax(530)581-6242

Ref: 6775.rpt

PLUS #

PERMIT/WP # WP0008796

WELL FINAL CERTIFICATE

Well Driller Name: PETERS DRILLING
Final Inspection Date: 06/12/2017
APN: 031-220-061-000
Date and Specific Time of Well Seal: May 30, 2017 /
Location of Well : XXXX CALLISON RD PENRYN 95663-

Property Owner: MIMA CAPITOL LLC
Telephone:
Mailing Address: 4120 DOUGLAS BLVD #306-175 GRANITE BAY CA 95746-

WELL SPECIFICATIONS

Work Completed: WELL - DOMESTIC/PUBLIC WELL PERMIT
Type of Well: INDIVIDUAL DOMESTIC
Depth of Well (ft): 120

Well Production Test (from Well Driller's report)
Pumping Rate (gpm): 30
Static Level (ft): 40
Storage Requirement (gal):

Duration of Continuous Pumping (hours): 4
Test Performed By: Driller
Date: 05/30/2017

Annular Seal:
Seal Depth (ft): 25
Material: BENTONITE
Witnessed By : RATH, LAURA
Date: 05/25/2017
ATF By: ,
ATF Date:

Inspection Waived? NO
If yes, explain:
How was seal applied? POUR

Based upon information provided by the contractor and conditions observed during site inspection...
the well meets minimum construction standards? YES
the well was drilled in an approved area? YES
the State Water Well Driller's Report was received? YES
this well is considered a standby well? N/A

Letter of intent received to keep...
Existing Hand Dug Well? N/A
Existing Drilled Well? N/A
Standby Well? N/A
N/A? N/A

Comments:

CONDITIONS OF PERMIT MET : Laura Rath REHS Date: 6/22/17

STATEMENT OF SATISFACTORY WELL CONSTRUCTIOIN/DESTRUCTION COMPLETION
This is to certify that the well construction/destruction work observed during site inspections is in compliance with pertinent ordinances, regulations and conditions of the permit. Issuance of this certification is in no way a guarantee of perfect or indefinite operation of this system.

Environmental Health Representative: [signature] Date: 6-12-17

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES

WELL SEAL INSPECTION FORM

REQUESTER/DRILLER NAME: Peters DATE: 5/30/17 TIME: 12:50

OWNER NAME: MIMA

LOCATION: Cannon Rd

Type of Work: (New Well) Destruction Reconstruction

Well Use: (Ind. Domestic) Public Agricultural

APN: 031-220-061 PERMIT/SR# WP # 8796

DATE & TIME OF INSPECTION: 5/30/17 12:50

ANNULAR SEAL INSPECTION WAIVED? [ ] YES [✓] NO If yes, Reason _____

WELL DRILLED IN APPROVED LOCATION? [✓] YES [ ] NO _____

AT THE TIME OF INSPECTION:

DEPTH OF WELL: 120* APPROXIMATE YIELD: 30GPM FIRST WATER: 90

DEPTH OF CASING: 110 CASING MATERIAL: PVC PERFORATIONS: bottom 20

ANNUALR SEAL DEPTH: 25' SEALING MATERIAL: Bentonite # OF BAGS 13 (POUR/PUMP)

MEETS MINIMUM CONSTRUCTION STANDARDS? [✓] YES [ ] NO _____

COMMENTS:	Hardrock Level	Size of Bit	Static Level	Type of Packer
	107'		40	Visquine

2 concrete

Bentonite ||||

Inspector: Laura Rat Date: 5/30/17

mare

Check No. 64998
Inv. No 108969
Receipt No. AY20015947
Amount 806
Date: 5/19/17
By: JP
Permit No. 8796
Dt. Issued 5/30/17
By: TB
FOR OFFICE USE ONLY

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES
3091 County Center Dr, Ste. 180, Auburn CA 95603 (530) 745-2300
Tahoe Office: 775 N. Lake Blvd Ste. 203 (PO Box 1909), Tahoe City, CA 96145-1909 (530) 581-6240
PE: 4545 OW:_____ FA:_____ WP: 8796

WATER WELL APPLICATION/PERMIT

To Construct, Repair, Reconstruct or Destroy a Water Well

APN 031-220-061 Well Driller: PETERS DRILLING CL# 456136 Type: C-57
MLD#_____ Address: PO BOX 1546 GRASS VALLEY 95945 Phone: 273-8136
Subdivision:_____ Property Owner: MIMA CAPITOL LLC
Parcel/Lot#_____ Address: 4120 DOUGLAS BLVD # 306-175 Phone:_____
Parcel Size 30.8 City: GRANITE BAY Zip 95746
Job Address/City No situs CALLISON RD PENRYN Zip 956663
Nearest Cross Street Taylor Rd
Concerns or Comments:_____

Type of Work: ☒ New Well ☐ Destruction* ☐ Deepening ☐ Modification ☐ Other**

Well Use: ☒ Individual ☐ Public ☐ Agricultural ☐ Other**_____

Are there any existing wells on the property? ☐ Yes ☐ No

Are there presently any abandoned wells on the property? ☐ Yes ☐ No

Are alternate drilling sites indicated?*** ☐ Yes ☐ No

Distance to nearest: Septic tank 200'+ Leaching field 200'+ Seepage pit 200'+
Sewer line 200'+ Property line 200'+ Other well 200'+

An application is complete only when the form is filled out in full, is signed by the licensed well driller and accompanied by the following:

1. A vicinity map and clear written directions to the proposed well site.
2. Copy of assessor's plat.
3. Appropriate permit filing fee.
4. Two(2) copies of an accurate site plan drawn to scale showing property lines, existing wells, sewage systems, sewer lines, animal feed lots, and all other features of potential contamination. Also show location of restrictions, e.g. easements, rights of way, sewer lines.

WORKER'S COMPENSATION DECLARATION

(One of the following must be completed)

☐ 1. A certified copy of Worker's Compensation Insurance is hereby furnished.
☒ 2. A current effective certificate is filed with the County Building Department or Environmental Health Services.
☐ 3. I certify that in performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the Worker's Compensation of California.

I have read and understand the statements, ordinance requirements and permit conditions (located above & on the back of page) and certify that all relevant activities will be performed in compliance with these statements and applicable code. I have shown all easements on the property.

Well Driller's Signature: Jay Murphy Date 5/19/17

DISPOSITION OF APPLICATION
(For Environmental Health Use Only)

Was a variance necessary for this work? ☐ Yes ☑ No

☑ Approved ☐ Denied (Refer to Water Well Permit Denial Notice)

Conditions: Drilling at own risk. Sewage disposal area has not been defined for parcel.

Environmental Health Representative: Laura Rath Date: 5/25/17

* **Complete an Abandoned Well Destruction form and submit with application.**
** **Additional information needed for "Standby Well" use.**
*** **If the location of the actual productive well is different from the primary drilling site, immediately submit a revised plot plan showing the site of the productive well and indicate the holes that have been destroyed.**

White/File Canary/Driller

ORDINANCE REQUIREMENTS

A. Submission of an incomplete application or omission of required information as outlined will result in a delay in processing your permit. The effective application receipt date will be the date on which all required information is received.

B. The permit can be denied if is found that issuance of the permit is not in the public interest, the application information is false, proposed work is not in compliance with the ordinance, there are abandoned wells on the property and there is no application for destruction, proposed construction prohibits zoned use of adjoining property, or the construction will be detrimental to surrounding property.

C. An application becomes a permit when approved and signed by Environmental Health Services personnel.

D. A permit issued is valid for one(1) year from the date of issuance. All work must be completed within that time. A new permit or permit renewal must be obtained to continue work after the initial permit expires. Permits are non-transferable.

E. Well work performed without a permit can result in a penalty fee, regulatory action and/or legal action.

F. Well driller must maintain a copy of the drilling permit at the drilling site during all phases of work.

G. Well construction, destruction or modification under a permit is subject to conditions or instructions by Environmental Health Services to carry out the ordinance objectives.

H. Except as otherwise specified, all construction, modification and destruction of wells must be in accordance with the Department of Water Resources Bulletin 74-81 and all of its subsequent supplements or revisions.

I. The well driller must phone Environmental Health Services a minimum of two(2) hours prior to sealing the annular space. At the scheduled inspection the Environmental Health representative will wait 15 minutes for commencement of the seal installation. If the driller fails to present within that time or if the driller is not ready to place the seal, a reinspection fee will be charged before rescheduling the reinspection. The well driller may postpone the seal inspection without a reinspection charge if the driller notifies the Environmental Health at least one(1) hour before the scheduled time. Only one postponement without reinspection charge will be allowed for each inspection request.

H. The state DWR Form 188 must be submitted to Environmental Health Services within 90 days of completion of the work.

PERMIT CONDITIONS

- This permit is non-transferable.
- This permit is valid for one (1) year from date of issue.
- A permit may be renewed only if application is made prior to expiration date.
- Issuance of a permit in no way indicates a guarantee of perfect or indefinite operation of this system.
- The well driller shall notify Environmental Health Services a minimum of 2 hours prior to sealing the well annular space.
- Construction work shall be performed by a licensed C-57 well drilling contractor and in compliance with standards prescribed in the California Department of Water Resources Bulletin 74-81 and all revisions.
- The well shall be located on the property as indicated on the approved plot plan.
- Environmental Health Services may condition this permit in any manner to carry out the purposes of the ordinance.
- Any abandoned wells on the property shall be destroyed in accordance with the standards referenced above.

LIABILITY FOR DAMAGES:

The applicant/permittee shall defend, indemnify, and hold harmless Placer County, and its agents, officers, and employees, from all claims, liability, damages, costs, lawsuits, and judgments for property damage, for personal injury, for construction costs or claims which may arise out or be alleged to relate to applicant's/permittee's work performed under a permit. The applicant's/permittee's obligations hereunder shall include the defense and indemnification of Placer County from any claim, liability, damages, costs, lawsuits, or judgments as asserted by any third party, expressly including any party under contract with applicant/permittee to perform any of the work under this application/permit.

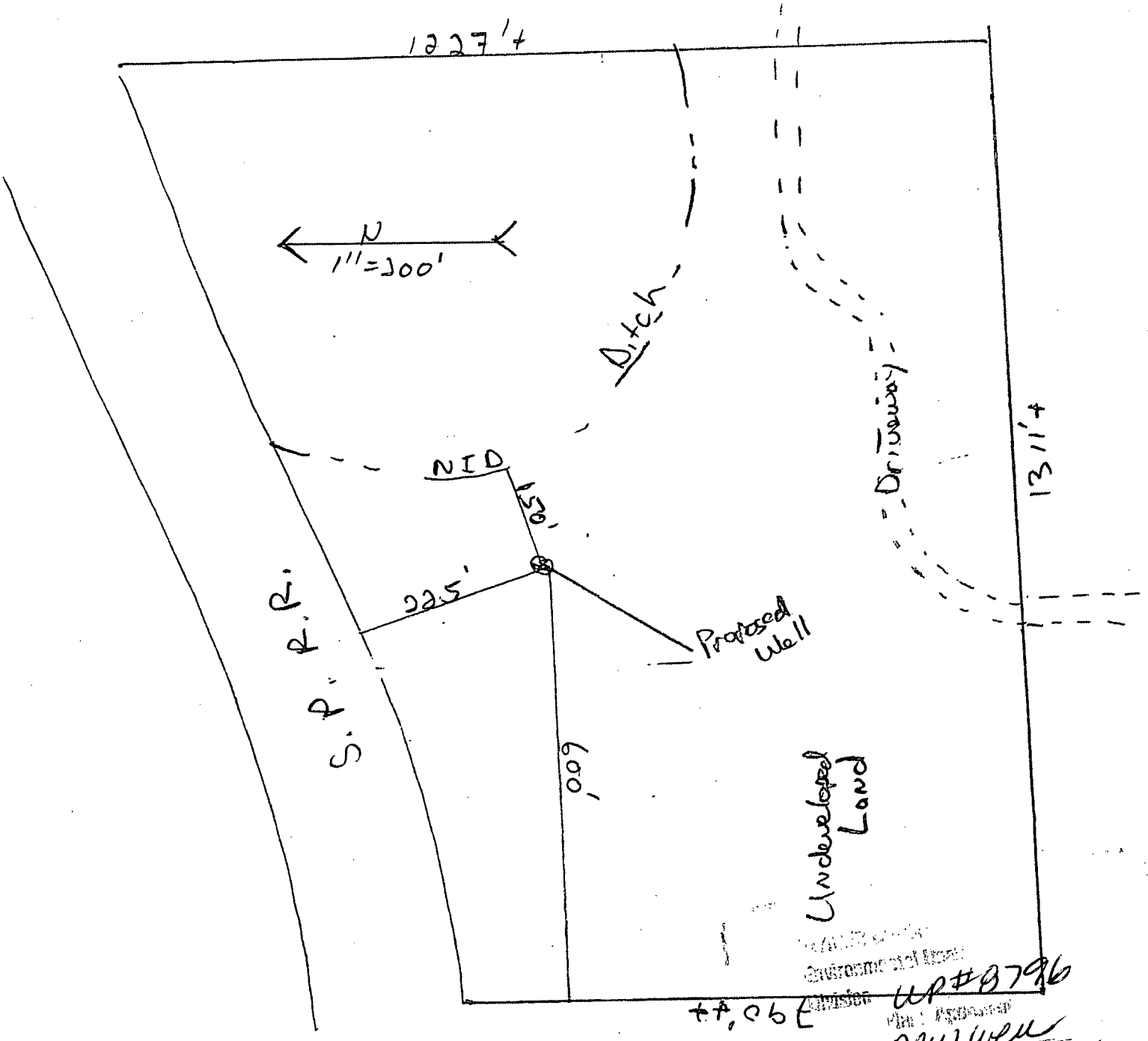
PETERS'
DRILLING &
PUMP SERVICE

P.O. Box 1546
Grass Valley, CA 95945
Grass Valley (530) 273-8136
FAX (530) 273-1213

Colfax (530) 346-6210
Auburn (530) 888-7311
Lincoln (916) 645-9692
Yuba County (530) 751-9009

Contractors Lic. No. 456136

MIMA Capitol LLC
Callison Rd
APN 031-220-061



UP#8796
New well
5/25/17
Signature
Title

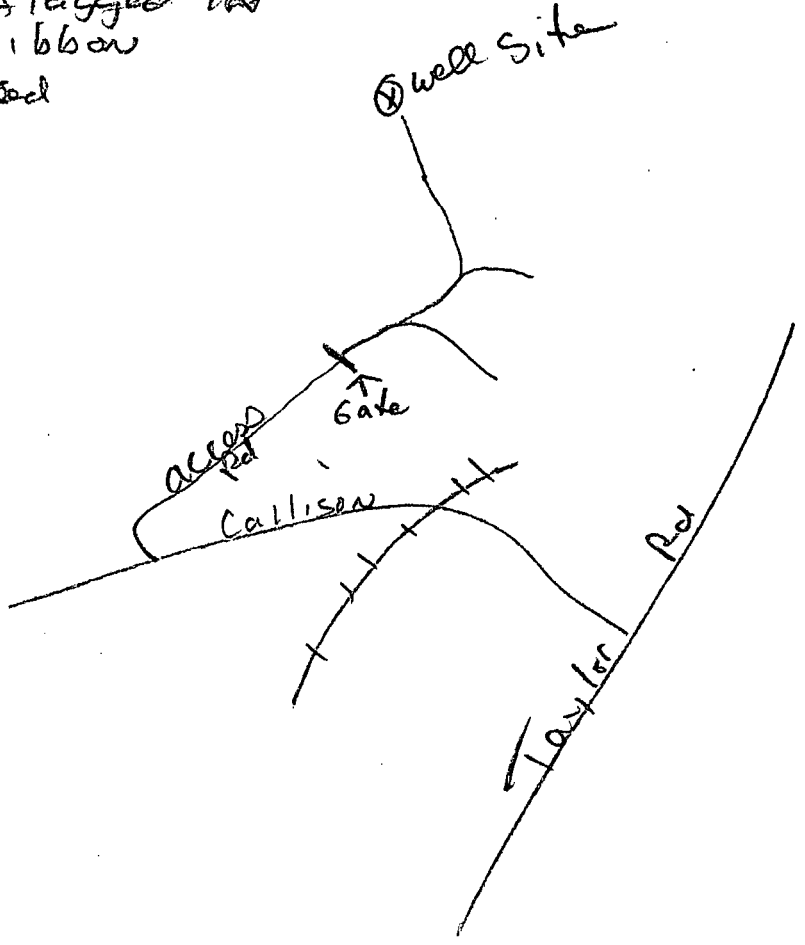
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Colfax (530) 346-6210
Auburn (530) 888-7311
Lincoln (916) 645-9692
Yuba County (530) 751-9009

Contractors Lic. No. 456136

Well site is flagged in
with yellow ribbon
well site is staked



AP# 031-220-61 MLD# _____ SUB. _____

CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS
3/4/20		Pre-Pre-development we project applicant. Large scale winery w/ restaurant and event center wine cave etc. Discussed requirements for review of project 1938 aerial photo shows portion of property was an orchard. Will need to speak w/ DTSC (over 50 acres) and complete Phase 2 site assessment. Will need public well, Danielle Pobl man w/ EHS discussed timing and requirements. Would need soils testing for onsite sewage disposal and large septic would be under review of the state (>10,000gpd) OR Official predevelopment will be scheduled in a few weeks		

BEM

Evan Mackenzie

4780 Rocklin Road
Rocklin, CA 95677

916.315.8877
916.741.7118

evanm@bem.com

Fournier Winery

Likely Requirements from Environmental Health

- **Public Well & Transient Non-Community Public Water System**
  - Applicant will need to first complete a technical report in compliance with SB1263 to explore the technical, financial and managerial capacity to connect to an existing treated water supply vs. develop a new public water system.
  - See guidance document which outlines steps to drill public well and obtain a transient non-community public water system permit.
  - The water well would need to demonstrate adequate quality and capacity to meet the project needs and state standards.
  - Public Wells and Public Water Systems are subject to State Health and Safety Code Standards (California Safe Drinking Water Act).

- **Food Facility**
  - Tasting room would require a permit from Environmental Health.
  - Applicant would first submit into the plan review process for Environmental Health to review the proposed food operations and kitchen/tasting room design. Facility would need to meet the California Retail Food Code.
  - Once constructed and permitted, the food facility would need to renew the health permit annually. The facility would be inspected regularly to determine compliance with California Retail Food Code.

- **Waste Disposal**
  - Soils testing (mantle and percolation testing) to define a sewage disposal area for proposed use(s).
  - Wine production waste water cannot go into the septic system. Contact Regional Water Quality Control Board for requirement of a waste discharge permit

- **Historic Land Uses**
  - Portion of property was used historically as an orchard in the 1930's. See 1938 aerial photo. Need to complete a Phase 2 Site Assessment. If residual contamination from pesticide use may be referred to Department of Toxic Substance Control (DTSC)




9-10-38
ARM-86-102



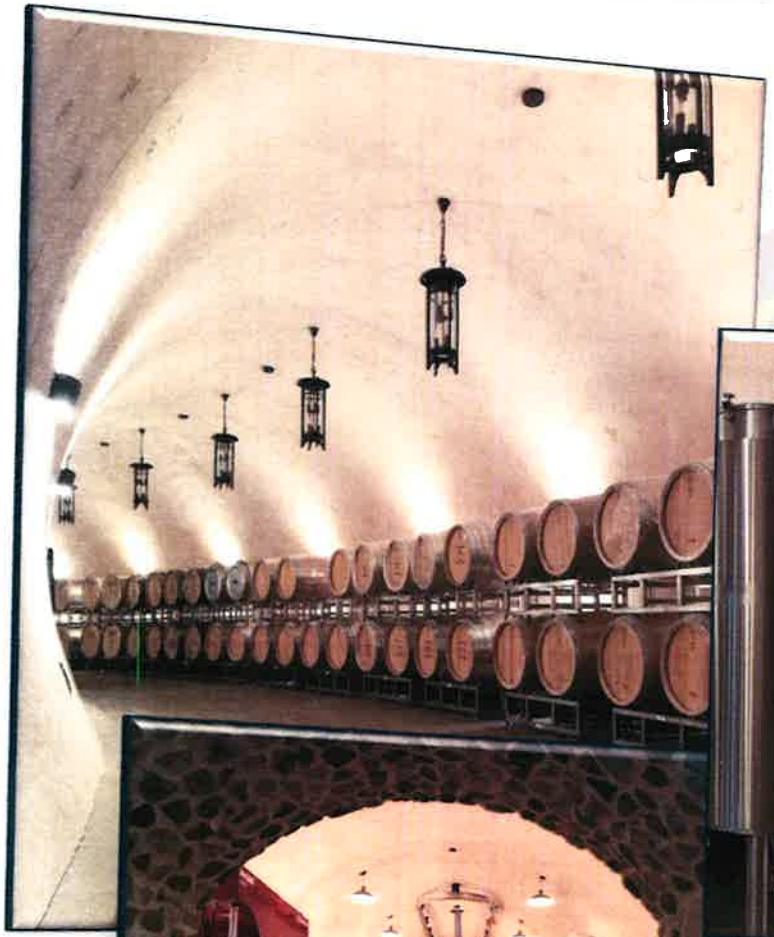
Building Engineering & Maintenance



BEM, Inc.
4780 Rocklin Rd
Rocklin, CA 95677

March, 2020

Granite Bay Winery











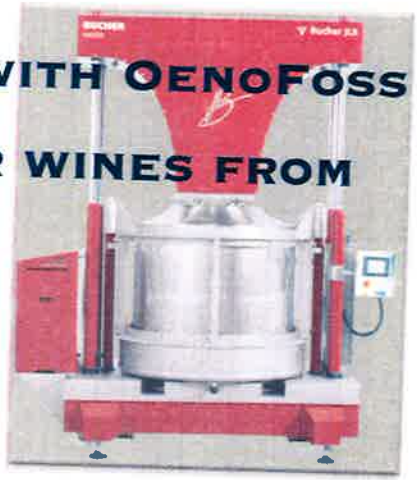
Proprietary and Confidential to BEM Inc.

Granite Bay Winery

- Bringing world class wine making methods and technology to Placer County
- Industry leading processing equipment
  - Automated optical sorting up to 4 tons/hr



- Equipment & Environmental monitoring/control utilizing renowned VinWizard technology
  - Real-time tank temperature analysis/control
    - Upgrading to Multi-Level Thermocouples for 2020 season
  - Full automated pump-over system at each tank
  - Integrated plumbing/controls for Nitrogen Sparging
  - Cave environment monitored/maintained at ideal temp/humidity/CO_2 content
- Onsite laboratory grade wine analysis with OenoFoss
- Process being developed to yield top tier wines from both local and imported grapes



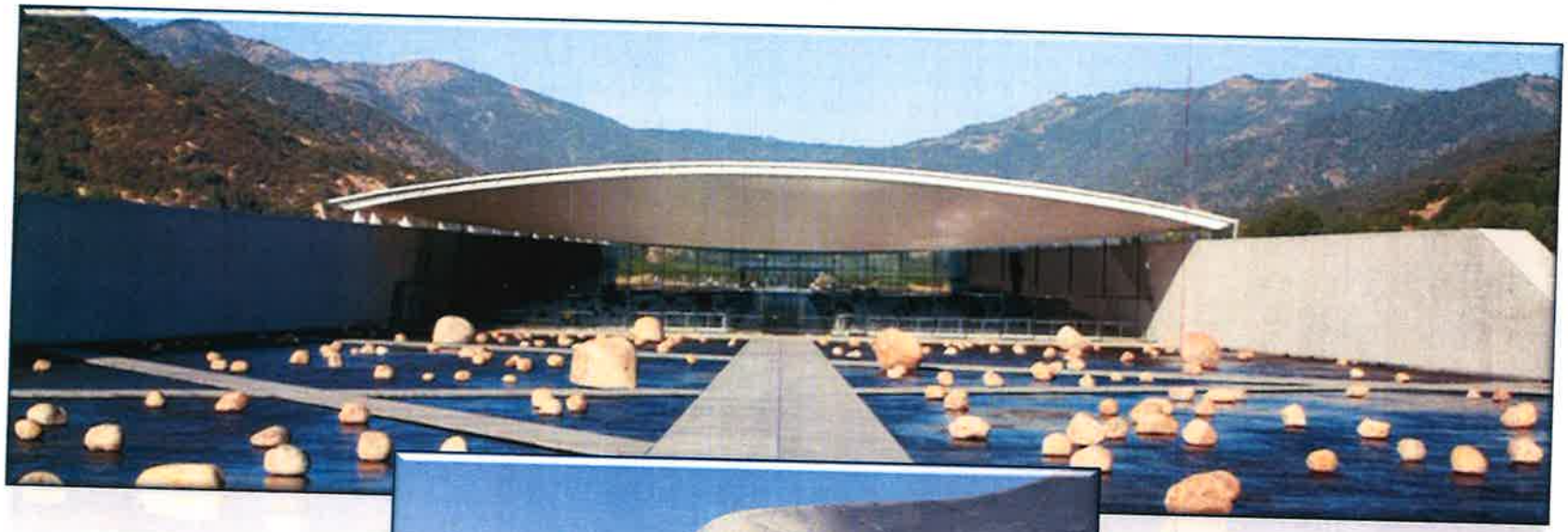
Proprietary and Confidential to BEM Inc.

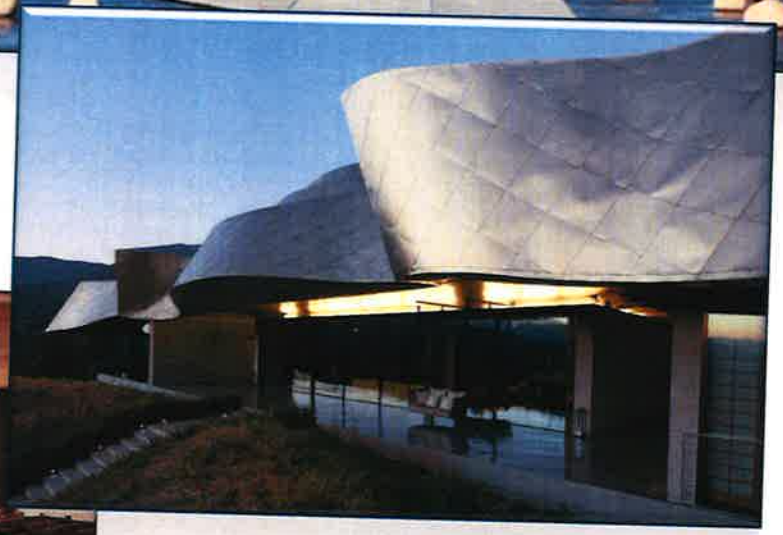
International Winery Tour

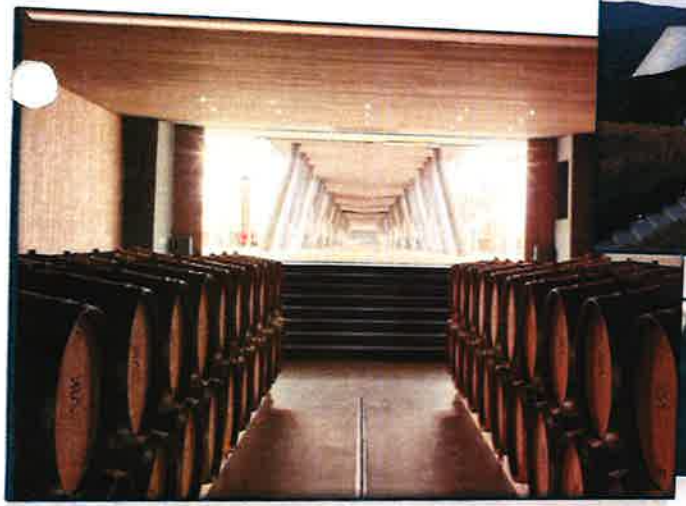
- Completed survey of world's top wineries January 2020
- The common focus across premier wineries is to provide wholistic experiences:
  - Immersive tastings pairing wines with exclusive gastronomical experiences
  - Avant-garde architectural design
  - Best available technological integration contrasted by raw beauty of natural surroundings
  - Prioritization of sustainability across entire operation
  - Full-service high-end event hosting

Proprietary and Confidential to BEM Inc.

Viña Vik - Chile







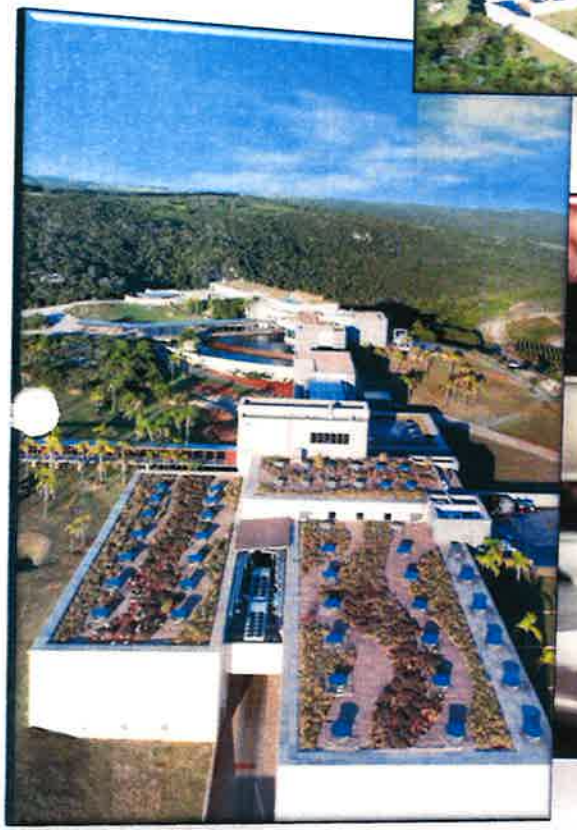




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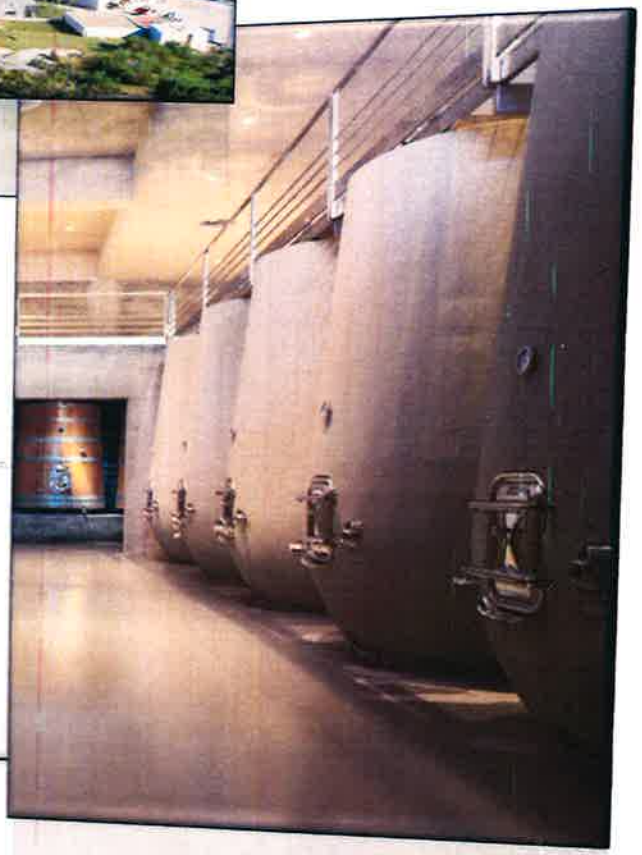
Bodega Garzon - Uruguay







Includes



D'ARENBERG – AUSTRALIA







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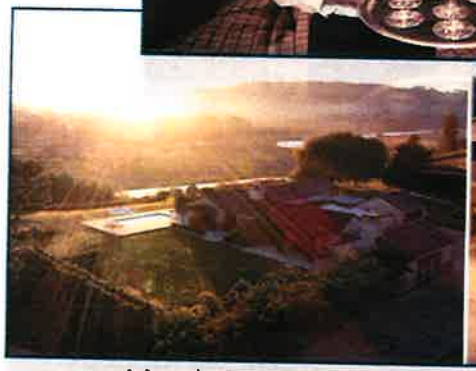
Craggy Range – New Zealand













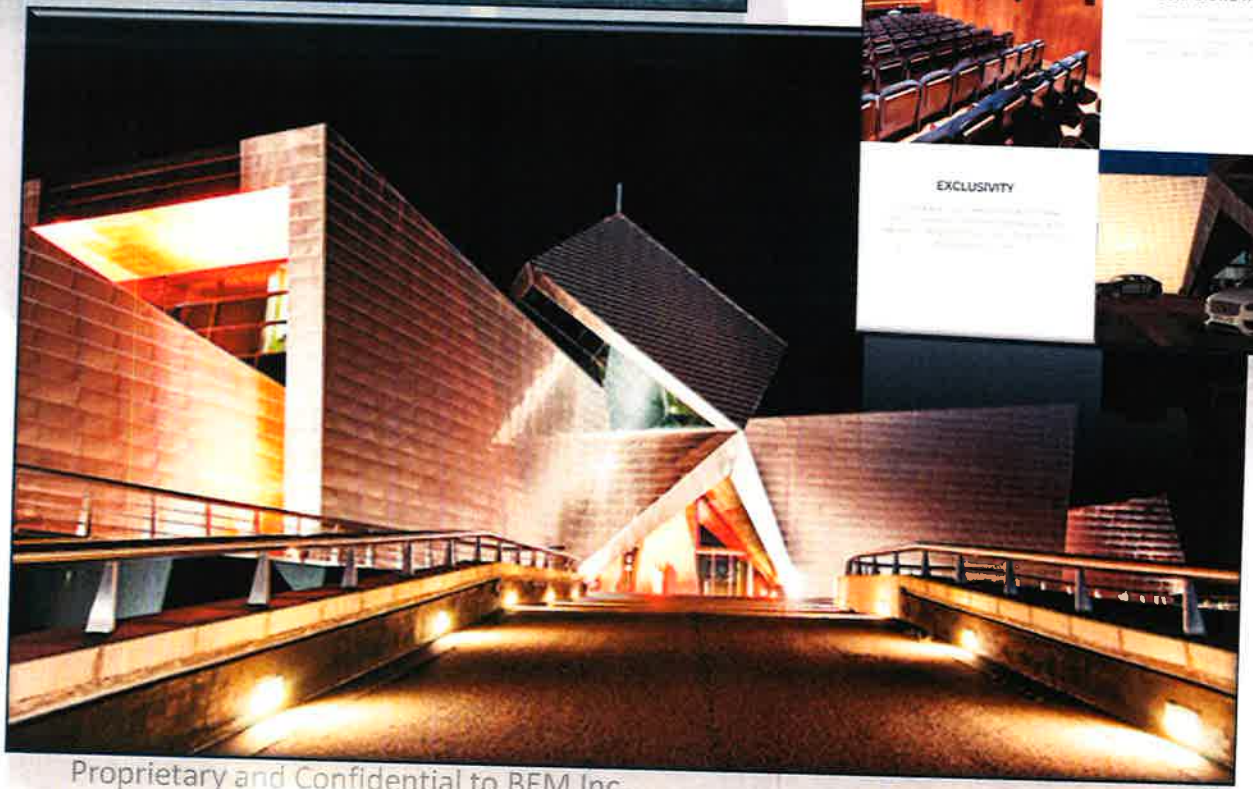
Proprietary and Confidential to BEM Inc.

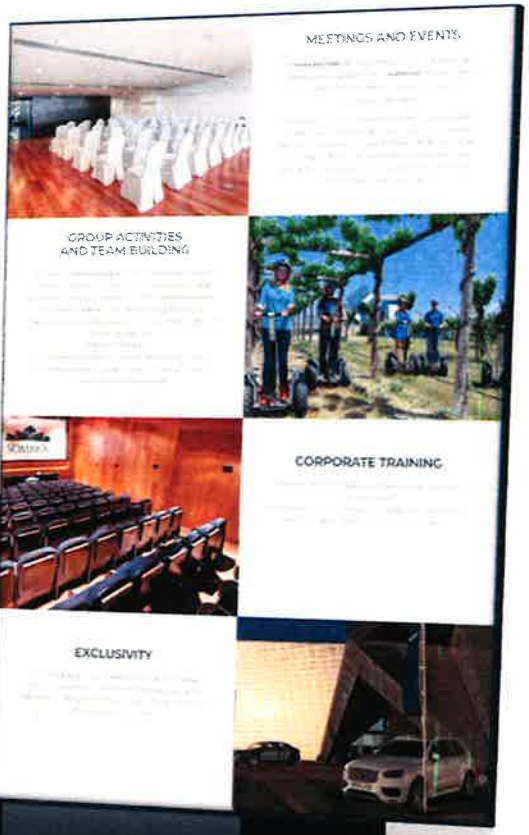
Bodega Sommos – Spain

"much more than a winery"











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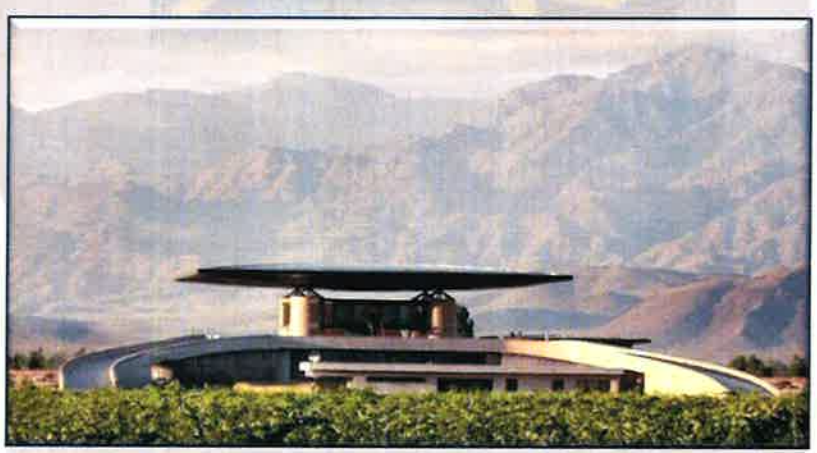
Global Iconic Wineries













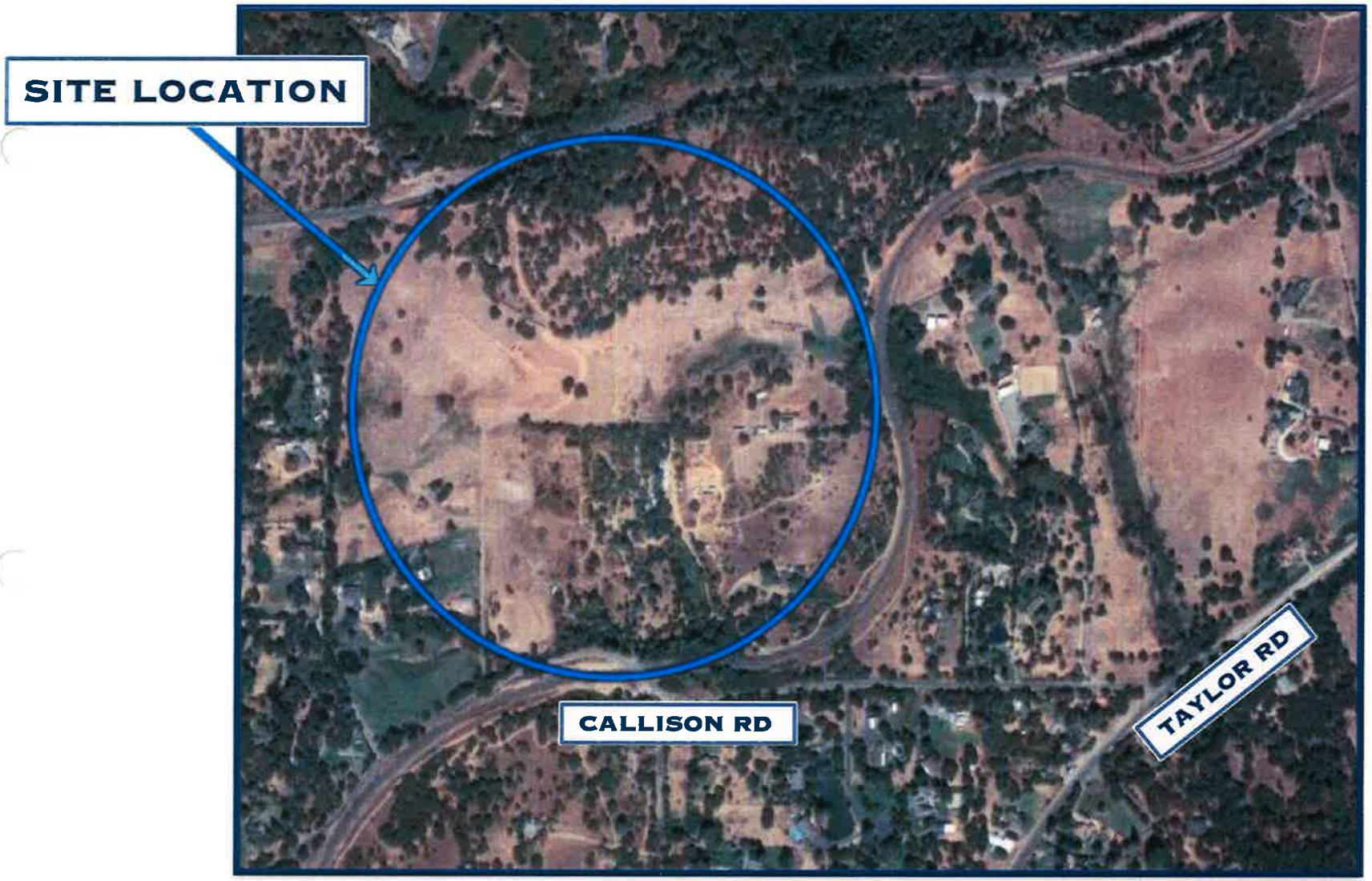






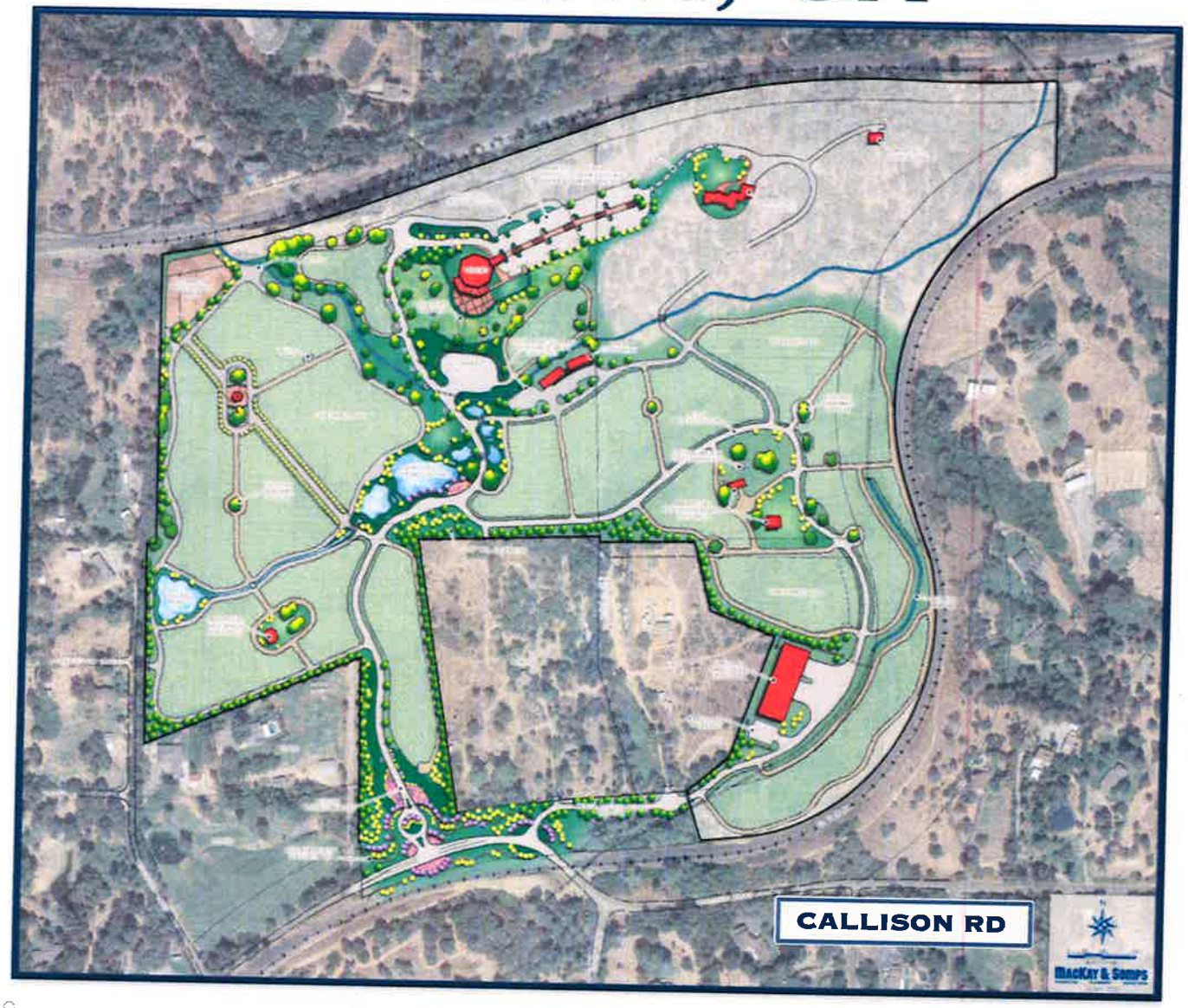
LECAVALIER CELLARS

PENRYN, CA



LECAVALIER CELLARS

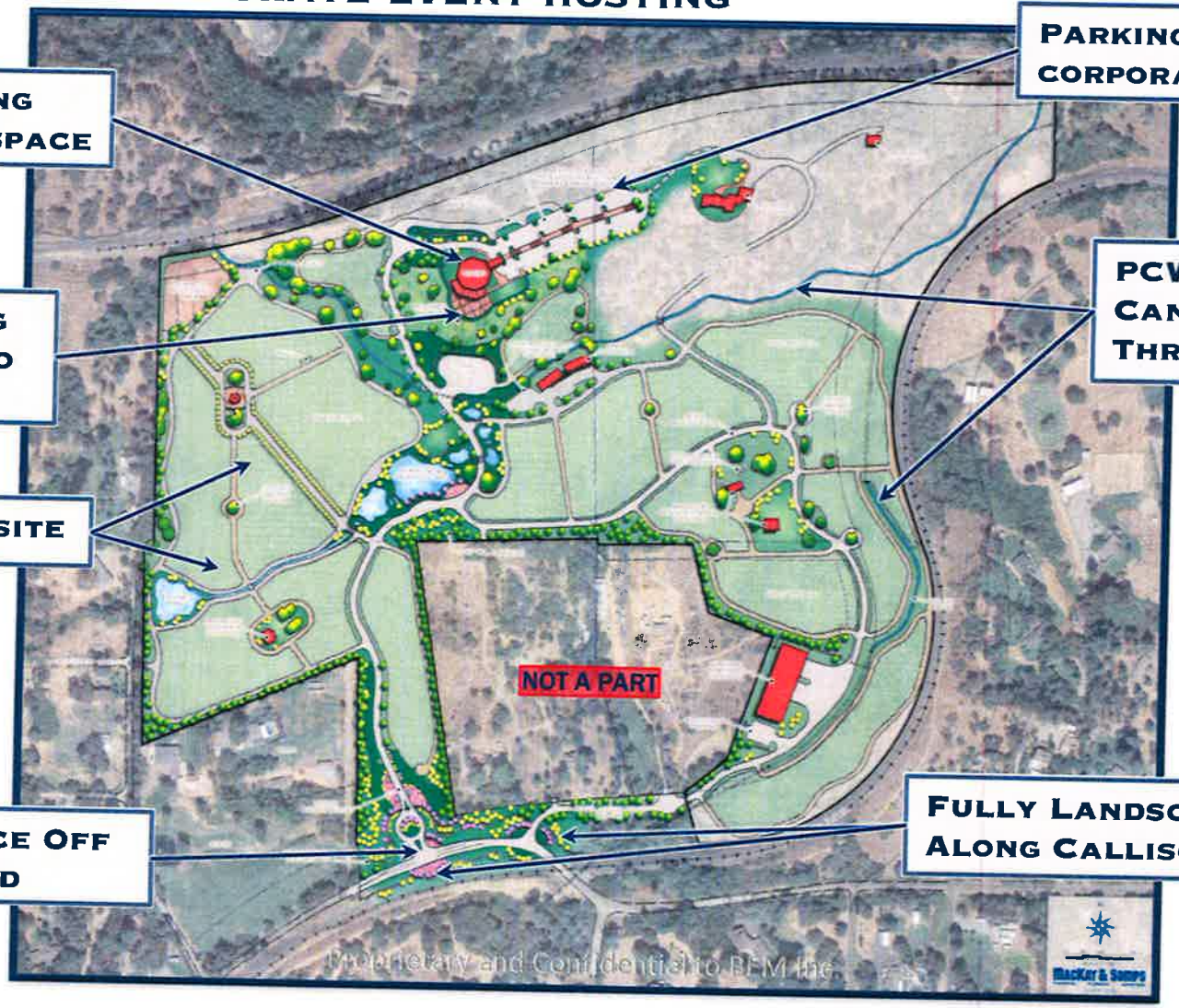
PENRYN, CA



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LECAVALIER CELLARS

- DESIGNED TO BE LANDMARK PLACER COUNTY DESTINATION
- ~90 ACRE SITE; APPROXIMATELY 1/2MI DEEP X 1/2MI WIDE
- WINERY/TASTING ROOM AT HIGHEST ELEVATION FOR NEARLY 360DEG VIEWS
- YEAR ROUND CORPORATE EVENT HOSTING



Proprietary and Confidential to BEM Inc.

LECAVALIER CELLARS



Lecavalier Cellars

- **By the numbers:**
  - **Winery processing: 40,000ft^2**
  - **Octagon surface area: 7,600ft^2 per level**
    - **Level 1: Grape sorting and cold storage**
    - **Level 2: Administration**
    - **Level 3: Apartment, commercial kitchen & guest quarters**
    - **Level 4: Tasting room & restaurant**
    - **Level 5: Observation deck**
  - **Wine cave**
    - **Barrel storage & meeting rooms: 15,000ft^2**
  - **Finished product storage: 20,000ft^2**
  - **Parking lot: 150 stalls**

Proprietary and Confidential to BEM Inc.

Lecavalier Cellars

- Helping to bring enotourism to Placer County!
- Projected Timeline

Entitlement Completion	Fall 2020
Vineyard Planting	Spring 2021
Roadway Construction	Summer 2021
Cave Construction	Fall 2021-2023
Remaining Buildout	Spring 2022-2023
Soft Open: Harvest → Processing	Fall 2023
Hard Launch: Open to Guests	Spring 2024

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QUESTIONS? / FEEDBACK?

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LeCavalier Cellars

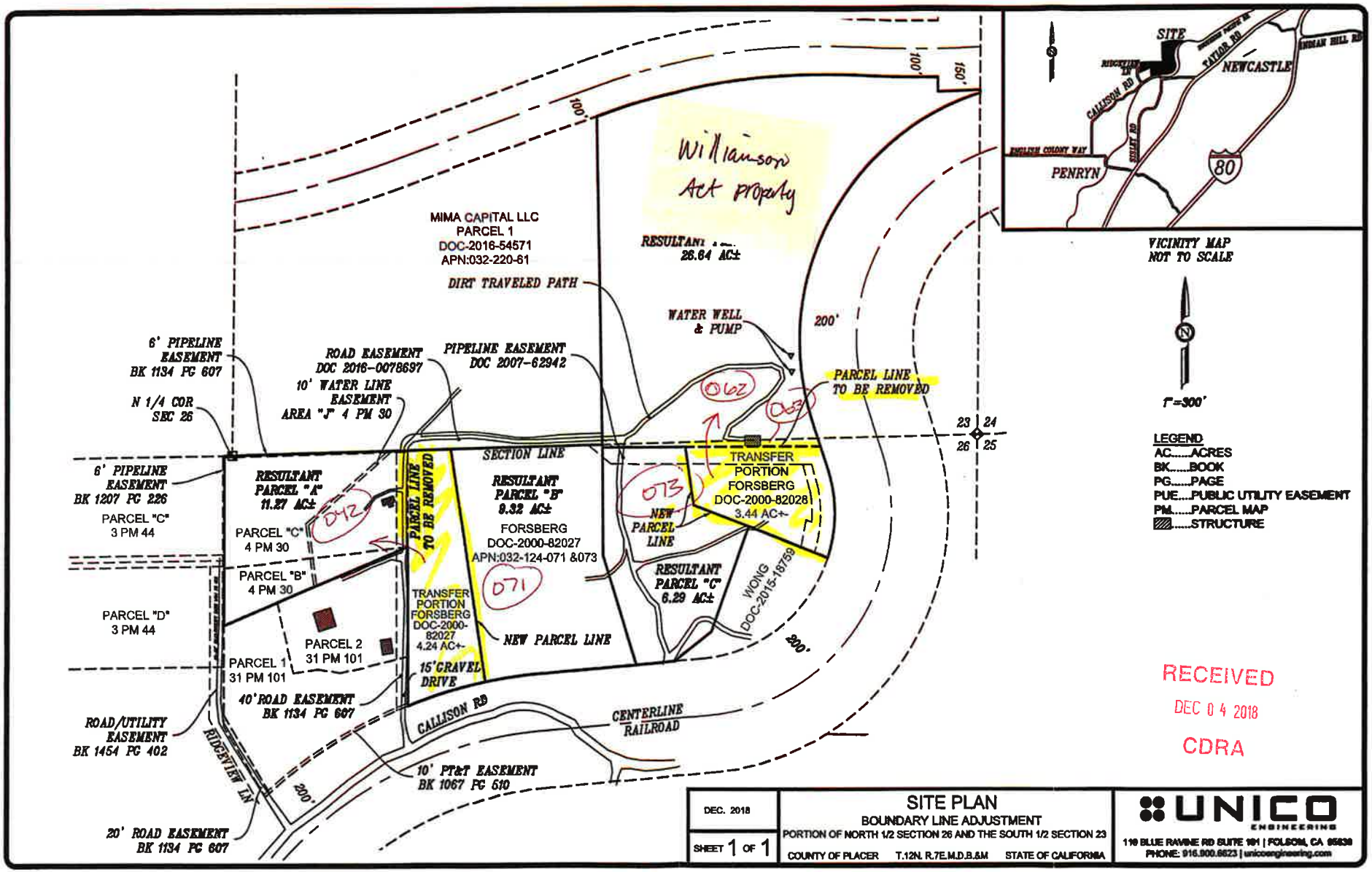


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AP# 031-220-062/65 MLD# _____ SUB. _____

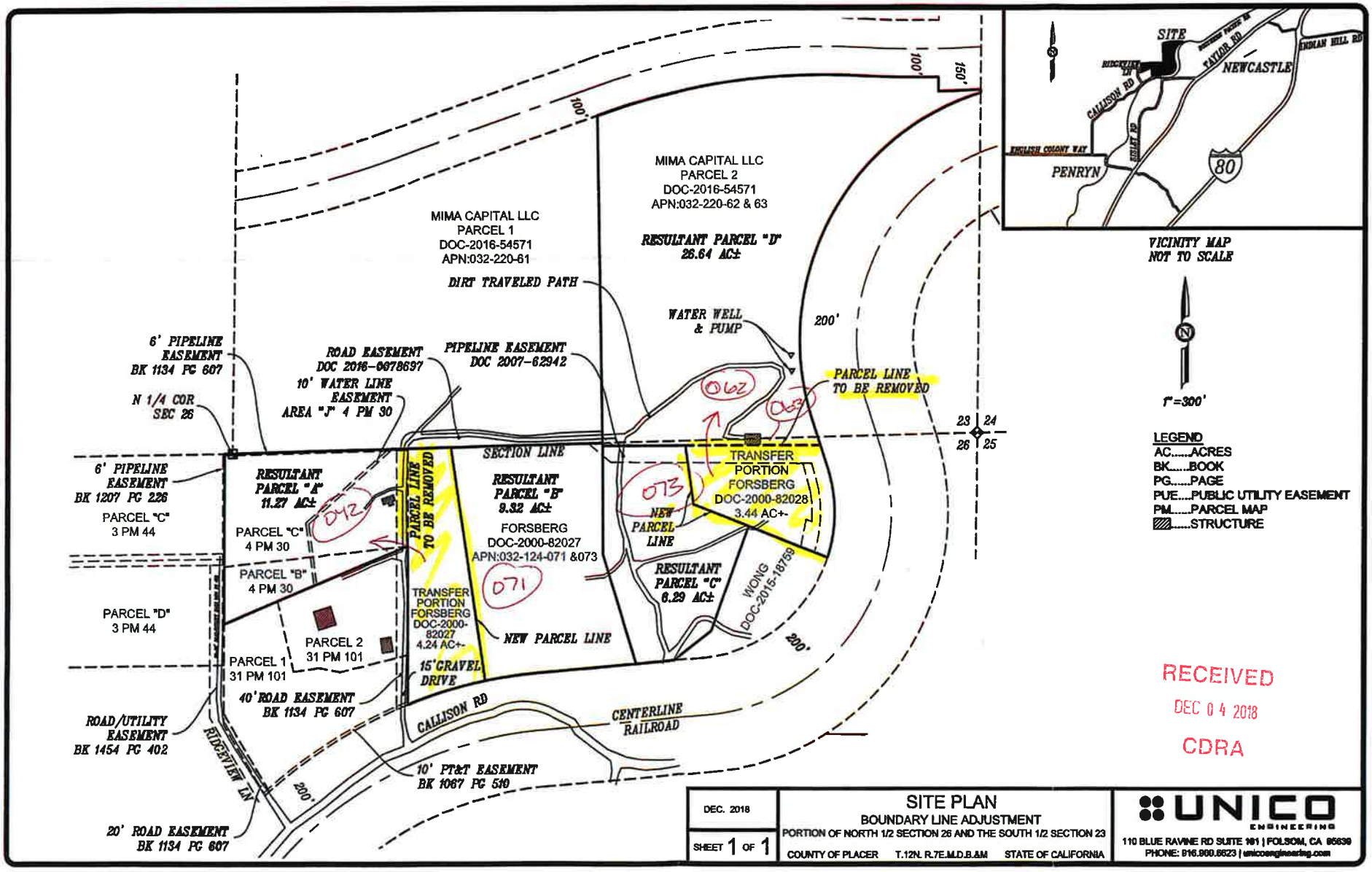
CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS



RECEIVED
DEC 04 2018
CDRA

DEC. 2018 SHEET 1 OF 1	SITE PLAN BOUNDARY LINE ADJUSTMENT PORTION OF NORTH 1/2 SECTION 26 AND THE SOUTH 1/2 SECTION 23 COUNTY OF PLACER T.12N. R.7E.M.D.B.&M STATE OF CALIFORNIA	UNICO ENGINEERING 110 BLUE RAVINE RD SUITE 101 | FOLSOM, CA 95630 PHONE: 916.900.8823 | unicoengineering.com



RECEIVED
DEC 04 2018
CDRA

DEC. 2018
SHEET 1 OF 1

SITE PLAN
BOUNDARY LINE ADJUSTMENT
PORTION OF NORTH 1/2 SECTION 26 AND THE SOUTH 1/2 SECTION 23
COUNTY OF PLACER T.12N. R.7E.M.D.B.&M STATE OF CALIFORNIA

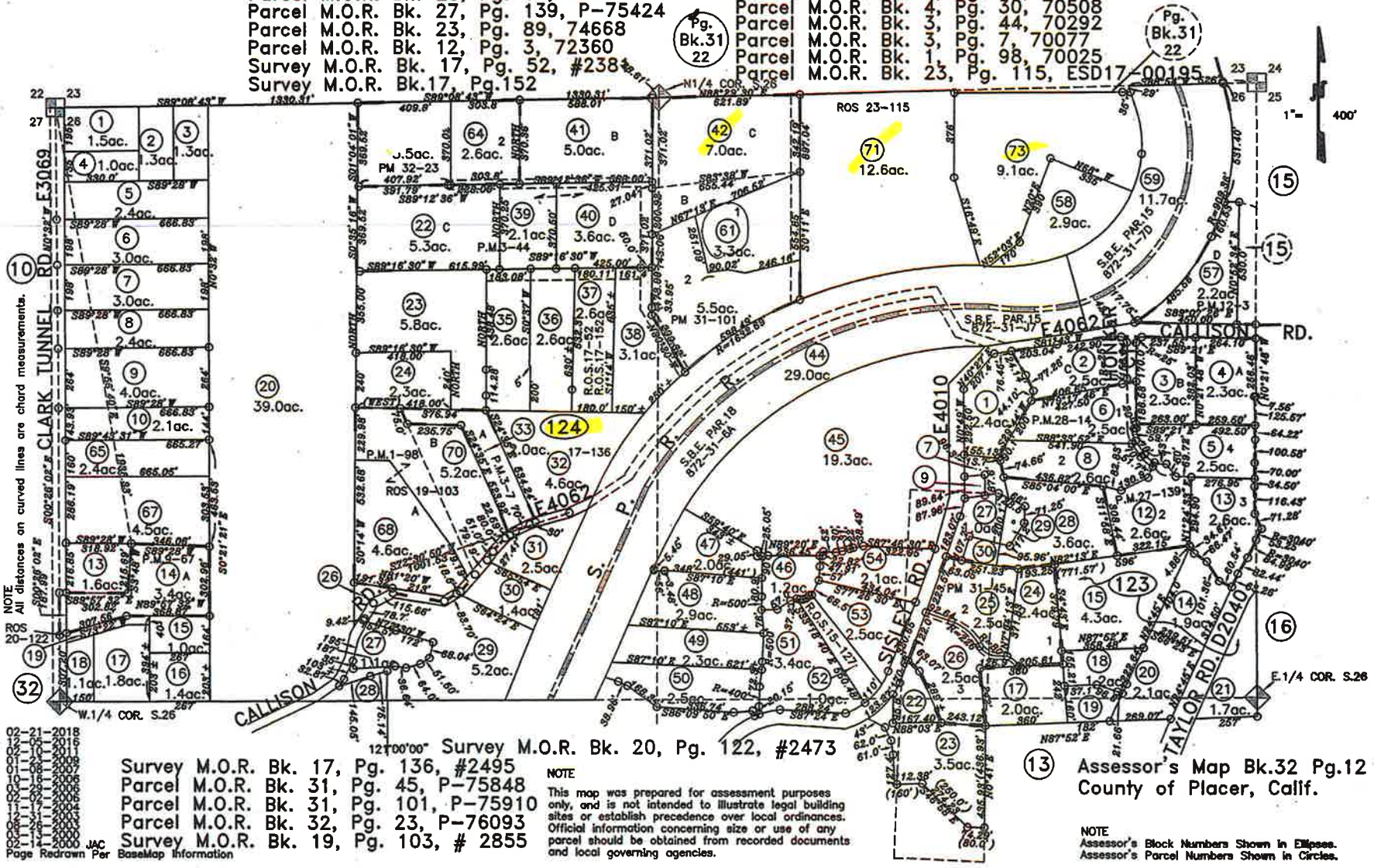
UNICO ENGINEERING
110 BLUE RAVINE RD SUITE 101 | FOLSOM, CA 95630
PHONE: 916.900.8623 | unicoengineering.com

N.1/2 & POR. S.E.1/4 SEC.26, T.12N., R.7E., M.D.B.&M.

32-12

Survey M.O.R. Bk. 15, Pg. 127
Parcel M.O.R. Bk. 28, Pg. 14, P-75497
Parcel M.O.R. Bk. 27, Pg. 139, P-75424
Parcel M.O.R. Bk. 23, Pg. 89, 74668
Parcel M.O.R. Bk. 12, Pg. 3, 72360
Survey M.O.R. Bk. 17, Pg. 52, #2383
Survey M.O.R. Bk.17, Pg.152

Parcel M.O.R. Bk. 9, Pg.125, P-72059
Parcel M.O.R. Bk. 9, Pg. 67, 71863
Parcel M.O.R. Bk. 4, Pg. 30, 70508
Parcel M.O.R. Bk. 3, Pg. 44, 70292
Parcel M.O.R. Bk. 3, Pg. 7, 70077
Parcel M.O.R. Bk. 1, Pg. 98, 70025
Parcel M.O.R. Bk. 23, Pg. 115, ESD17-00195



02-21-2018
12-05-2016
02-05-2011
01-21-2009
01-08-2007
10-16-2006
03-29-2006
02-02-2006
11-17-2004
12-31-2003
08-26-2003
03-13-2000
02-14-2000 JAC Page Redrawn Per BaseMap Information

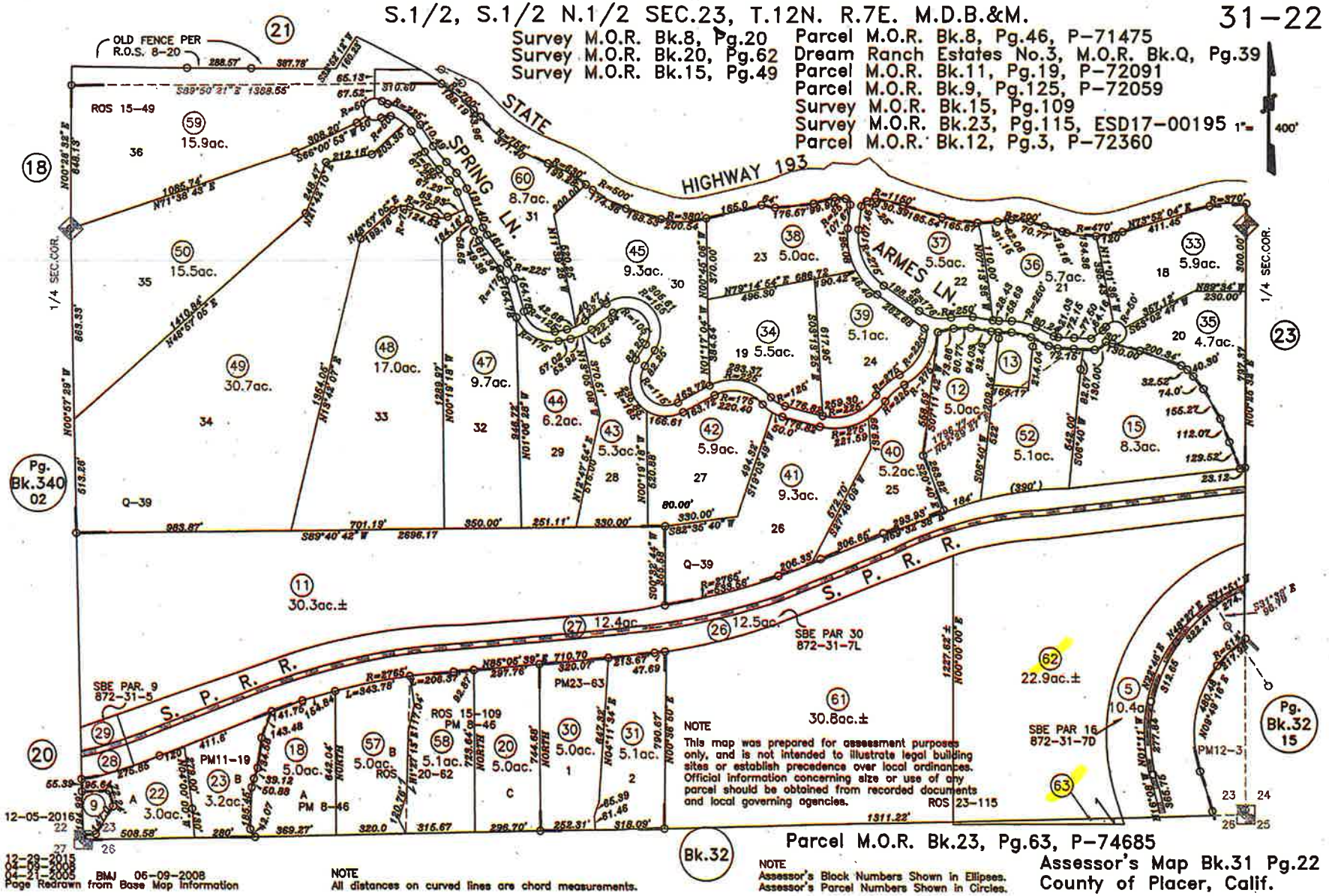
Survey M.O.R. Bk. 17, Pg. 136, #2495
Parcel M.O.R. Bk. 31, Pg. 45, P-75848
Parcel M.O.R. Bk. 31, Pg. 101, P-75910
Parcel M.O.R. Bk. 32, Pg. 23, P-76093
Survey M.O.R. Bk. 19, Pg. 103, # 2855

Survey M.O.R. Bk. 20, Pg. 122, #2473

NOTE
This map was prepared for assessment purposes only, and is not intended to illustrate legal building sites or establish precedence over local ordinances. Official information concerning size or use of any parcel should be obtained from recorded documents and local governing agencies.

(13) Assessor's Map Bk.32 Pg.12
County of Placer, Calif.

NOTE
Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.


S.1/2, S.1/2 N.1/2 SEC.23, T.12N. R.7E. M.D.B.&M.
31-22
Survey M.O.R. Bk.8, Pg.20
Survey M.O.R. Bk.20, Pg.62
Survey M.O.R. Bk.15, Pg.49
Parcel M.O.R. Bk.8, Pg.46, P-71475
Dream Ranch Estates No.3, M.O.R. Bk.Q, Pg.39
Parcel M.O.R. Bk.11, Pg.19, P-72091
Parcel M.O.R. Bk.9, Pg.125, P-72059
Survey M.O.R. Bk.15, Pg.109
Survey M.O.R. Bk.23, Pg.115, ESD17-00195
Parcel M.O.R. Bk.12, Pg.3, P-72360
1" = 400'
STATE HIGHWAY 193
SPRING LN.
ARMES LN.
S. P. R. R.
1/4 SEC.COR.
OLD FENCE PER R.O.S. 8-20
ROS 15-49
59 15.9ac.
50 15.5ac.
49 30.7ac.
48 17.0ac.
47 9.7ac.
60 8.7ac.
45 9.3ac.
44 6.2ac.
43 5.3ac.
42 5.9ac.
41 9.3ac.
40 5.2ac.
38 5.0ac.
37 5.5ac.
36 5.7ac.
34 5.5ac.
39 5.1ac.
12 5.0ac.
52 5.1ac.
15 8.3ac.
33 5.9ac.
35 4.7ac.
11 30.3ac.±
27 12.4ac
26 12.5ac.
61 30.8ac.±
62 22.9ac.±
5 10.4ac
SBE PAR. 9 872-31-5
SBE PAR 30 872-31-7L
SBE PAR 16 872-31-7D
PM11-19
PM 8-46
PM23-63
PM12-3
ROS 15-109
ROS 20-62
ROS 23-115
Pg. Bk.340 02
Pg. Bk.32 15
Bk.32
NOTE
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NOTE
All distances on curved lines are chord measurements.
NOTE
Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Parcel M.O.R. Bk.23, Pg.63, P-74685
Assessor's Map Bk.31 Pg.22
County of Placer, Calif.
12-05-2016
12-29-2015
04-09-2008
04-21-2005
BMJ 05-09-2008
Page Redrawn from Base Map Information

AP# _____ MLD# _____ SUB. _____

CONTACT SHEET/ACTIVITY LOG

DATE	SR#/CO#	NOTES	TIME	REHS
7/5/13	WP7912	Field review for well permits. No file info on septic, house built in the 60's. Both well sites are OK. Permit indicates no wells on property. Behind house is a 4x4 concrete box w/ shed on top and storage tanks and piping inside. Could see if vent and see water to the top of concrete. Could be a hand dug well or ditch water storage. Left message w/ Jerry Peters, if hand dug well need destruction permit prior to new well permit issuance or needs to let us know if ditch H2O storage change.		JR
7/8/13	WP 7912	Approved well permit. TCW/ Jerry Murphy (Peter's) Concrete box is water storage for ditch water. Approx depth 5 to 6'.		MS

Revised 12/97

ref:c:\forms\contctsh.doc

TOTAL _____

Placer County Health & Human Services
ENVIRONMENTAL HEALTH SERVICES
3091 County Center Dr,
Suite 180 ,
Auburn CA 95603
Phone (530) 745-2300 Fax (530)745-2370

775 North Lake Blvd, Suite 203
Tahoe City, CA 96145
Ph:(530) 581-6240 : Fax(530)581-6242

Ref: 6775.rpt

PLUS # **PERMIT/WP #** WP0007912

WELL FINAL CERTIFICATE

Well Driller Name: PETERS WELL DRILLING Final Inspection Date: 11/12/2013
APN: 031-220-004-000
Date and Specific Time of Well Seal: July 10, 2013 /
Location of Well : 8085 CALLISON RD PENRYN 95663

Property Owner: 031-220-004-000 Telephone:
Mailing Address:

WELL SPECIFICATIONS

Work Completed: WELL - DOMESTIC/PUBLIC WELL PERMIT
Type of Well: INDIVIDUAL DOMESTIC
Depth of Well (ft): 325

Well Production Test (from Well Driller's report) Pumping Rate (gpm): 2
Static Level (ft): 55
Storage Requirement (gal): 275.00

Duration of Continuous Pumping (hours): 4
Test Performed By: Driller Date: 07/11/2013

Annular Seal:
Seal Depth (ft): 26 Material: BENTONITE
Witnessed By : LELAND, SUSAN Date: 07/10/2013
ATF By: , ATF Date:

Inspection Waived? NO
If yes, explain:
How was seal applied? POURED

Based upon information provided by the contractor and conditions observed during site inspection...
the well meets minimum construction standards? YES
the well was drilled in an approved area? YES
the State Water Well Driller's Report was received? YES
this well is considered a standby well? N/A

Letter of intent received to keep...
Existing Hand Dug Well? N/A
Existing Drilled Well? N/A
Standby Well? N/A
N/A? N/A

Comments:

CONDITIONS OF PERMIT MET : Lana Rater REHS Date: 11/13/13

STATEMENT OF SATISFACTORY WELL CONSTRUCTIOIN/DESTRUCTION COMPLETION
This is to certify that the well construction/destruction work observed during site inspections is in compliance with pertinent ordinances, regulations and conditions of the permit. Issuance of this certification is in no way a guarantee of perfect or indefinite operation of this system.

Environmental Health Representative: _____ Date: 11/13/13

PLACER COUNTY HEALTH & HUMAN SERVICES
ENVIRONMENTAL HEALTH SERVICES

WELL SEAL INSPECTION FORM

REQUESTER/DRILLER NAME: Peters DATE: 7/10/13 TIME: 1:45pm

OWNER NAME: Mike Fournier

LOCATION: 8085 Callison RD Penryn

Type of Work: (New Well) Destruction Reconstruction

Well Use: Ind. Domestic Public Agricultural

APN: 031-220-004 PERMIT/SR# 7912

DATE & TIME OF INSPECTION: 7/10/13 1:30pm

ANNULAR SEAL INSPECTION WAIVED? [ ] YES [X] NO If yes, Reason

WELL DRILLED IN APPROVED LOCATION? [X] YES [ ] NO

AT THE TIME OF INSPECTION:

DEPTH OF WELL: 85' APPROXIMATE YIELD: Unkn FIRST WATER: 55'

DEPTH OF CASING: 70' CASING MATERIAL: PVC PERFORATIONS: yes - SPF

ANNUALR SEAL DEPTH: 26' SEALING MATERIAL: 18 # OF BAGS Bentonite (POUR) PUMP

MEETS MINIMUM CONSTRUCTION STANDARDS? [X] YES [ ] NO

COMMENTS: **Hardrock Level** **Size of Bit** **Static Level** **Type of Packer**

Concrete - 11

Bentonite - IIII IIII IIII III

Inspector: [signature] **Date:** 7/10/13

[redacted] 8535
Receipt No. 17-90439
Amount 766
Date 7-3-13
By: Jill
Permit No. 7912
Dt. Issued 7-8-13
By: DA
FOR OFFICE USE ONLY

PLACER COUNTY HEALTH & HU[illegible]N SERVICES
ENVIRONMENTAL HEALTH SERVICES

3091 County Center Dr, Ste. 180 , Auburn CA 95603 (530) 745-2300
Tahoe Office: 565 W. Lake Blvd (P.O. Box 1909), Tahoe City, CA 96145 (530) 581-6240

PE: 4245 PLUS: 20131147 OW: 18210 FA: 19421 WP: 7912

WATER WELL APPLICATION/PERMIT

To Construct, Repair, Reconstruct or Destroy A Water Well

APN 031-220-004-510 Well Driller: Peters' Drilling & Pump CL# 456136 Type: C-57
MLD# _____ Address: P.O. Box 1546 Grass Valley, CA 95945 Phone: 530-273-8136
Subdivision: _____ Property Owner: Mike Fournier
Parcel/Lot# _____ Address: 4525 Remuda Court Phone: 916 813-9920
Parcel Size 54 City: Granite Bay Zip 95746
Job Address/City 8085 Callison Road, Penryn 95663
Nearest Cross Street Taylor Rd
Concerns or Comments: _____

Type of Work: ☒ New Well ☐ Destruction* ☐ Deepening ☐ Modification ☐ Other**

Well Use: ☒ Individual ☐ Public ☐ Agricultural ☐ Other** _____

Are there any existing wells on the property? ☐ Yes ☒ No

Are there presently any abandoned wells on the property? ☐ Yes ☒ No

Are alternate drilling sites indicated?*** ☒ Yes ☐ No

Distance to nearest: Septic tank 300'+ Leaching field 300'+ Seepage pit 300'+
Sewer line 300'+ Property line 100'+ Other well 300'+

An application is complete only when the form is filled out in full, is signed by the licensed well driller and accompanied by the following:

1. A vicinity map and clear written directions to the proposed well site.
2. Copy of assessor's plat.
3. Appropriate permit filing fee.
4. Two(2) copies of an accurate site plan drawn to scale showing property lines, existing wells, sewage systems, sewer lines, animal feed lots, and all other features of potential contamination. Also show location of restrictions, e.g. easements, rights of way, sewer lines.

WORKER'S COMPENSATION DECLARATION

(One of the following must be completed)

☐ 1. A certified copy of Worker's Compensation Insurance is hereby furnished.
☒ 2. A current effective certificate is filed with the County Building Department or Environmental Health Services.
☐ 3. I certify that in performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the Worker's Compensation of California.

I have read and understand the statements, ordinance requirements and permit conditions (located above & on the back of page) and certify that all relevant activities will be performed in compliance with these statements and applicable code. I have shown all easements on the property.

Well Driller's Signature: Jay Murphy Date 7/2/13

DISPOSITION OF APPLICATION
(For Environmental Health Use Only)

Was a variance necessary for this work? ☐ Yes ☒ No

☒ Approved ☐ Denied (Refer to Water Well Permit Denial Notice)

RECEIVED
JUL 02 2013
PLACER COUNTY ENV. HEALTH

Conditions: _____

Environmental Health Representative: _____ Date: 7/8/13

* **Complete an Abandoned Well Destruction form and submit with application.**
** **Additional information needed for "Standby Well" use.**
*** **If the location of the actual productive well is different from the primary drilling site, immediately submit a revised plot plan showing the site of the productive well and indicate the holes that have been destroyed.**

White/File Canary/Driller

ORDINANCE REQUIREMENTS

A. Submission of an incomplete application or omission of required information as outlined will result in a delay in processing your permit. The effective application receipt date will be the date on which all required information is received.

B. The permit can be denied if is found that issuance of the permit is not in the public interest, the application information is false, proposed work is not in compliance with the ordinance, there are abandoned wells on the property and there is no application for destruction, proposed construction prohibits zoned use of adjoining property, or the construction will be detrimental to surrounding property.

C. An application becomes a permit when approved and signed by Environmental Health Services personnel.

D. A permit issued is valid for one(1) year from the date of issuance. All work must be completed within that time. A new permit or permit renewal must be obtained to continue work after the initial permit expires. Permits are non-transferable.

E. Well work performed without a permit can result in a penalty fee, regulatory action and/or legal action.

F. Well driller must maintain a copy of the drilling permit at the drilling site during all phases of work.

G. Well construction, destruction or modification under a permit is subject to conditions or instructions by Environmental Health Services to carry out the ordinance objectives.

H. Except as otherwise specified, all construction, modification and destruction of wells must be in accordance with the Department of Water Resources Bulletin 74-81 and all of its subsequent supplements or revisions.

I. The well driller must phone Environmental Health Services a minimum of two(2) hours prior to sealing the annular space. At the scheduled inspection the Environmental Health representative will wait 15 minutes for commencement of the seal installation. If the driller fails to present within that time or if the driller is not ready to place the seal, a reinspection fee will be charged before rescheduling the reinspection. The well driller may postpone the seal inspection without a reinspection charge if the driller notifies the Environmental Health at least one(1) hour before the scheduled time. Only one postponement without reinspection charge will be allowed for each inspection request.

H. The state DWR Form 188 must be submitted to Environmental Health Services within 90 days of completion of the work.

PERMIT CONDITIONS

- This permit is non-transferable.
- This permit is valid for one(1) year from date of issue.
- A permit may be renewed only if application is made prior to expiration date.
- Issuance of a permit in no way indicates a guarantee of perfect or indefinite operation of this system.
- The well driller shall notify Environmental Health Services a minimum of 2 hours prior to sealing the well annular space.
- Construction work shall be performed by a licensed C-57 well drilling contractor and in compliance with standards prescribed in the California Department of Water Resources Bulletin 74-81 and all revisions.
- The well shall be located on the property as indicated on the approved plot plan.
- Environmental Health Services may condition this permit in any manner to carry out the purposes of the ordinance.
- Any abandoned wells on the property shall be destroyed in accordance with the standards referenced above.

LIABILITY FOR DAMAGES:

The applicant/permittee shall defend, indemnify, and hold harmless Placer County, and its agents, officers, and employees, from all claims, liability, damages, costs, lawsuits, and judgments for property damage, for personal injury, for construction costs or claims which may arise out or be alleged to relate to applicant's/permittee's work performed under a permit. The applicant's/permittee's obligations hereunder shall include the defense and indemnification of Placer County from any claim, liability, damages, costs, lawsuits, or judgments as asserted by any third party, expressly including any party under contract with applicant/permittee to perform any of the work under this application/permit.

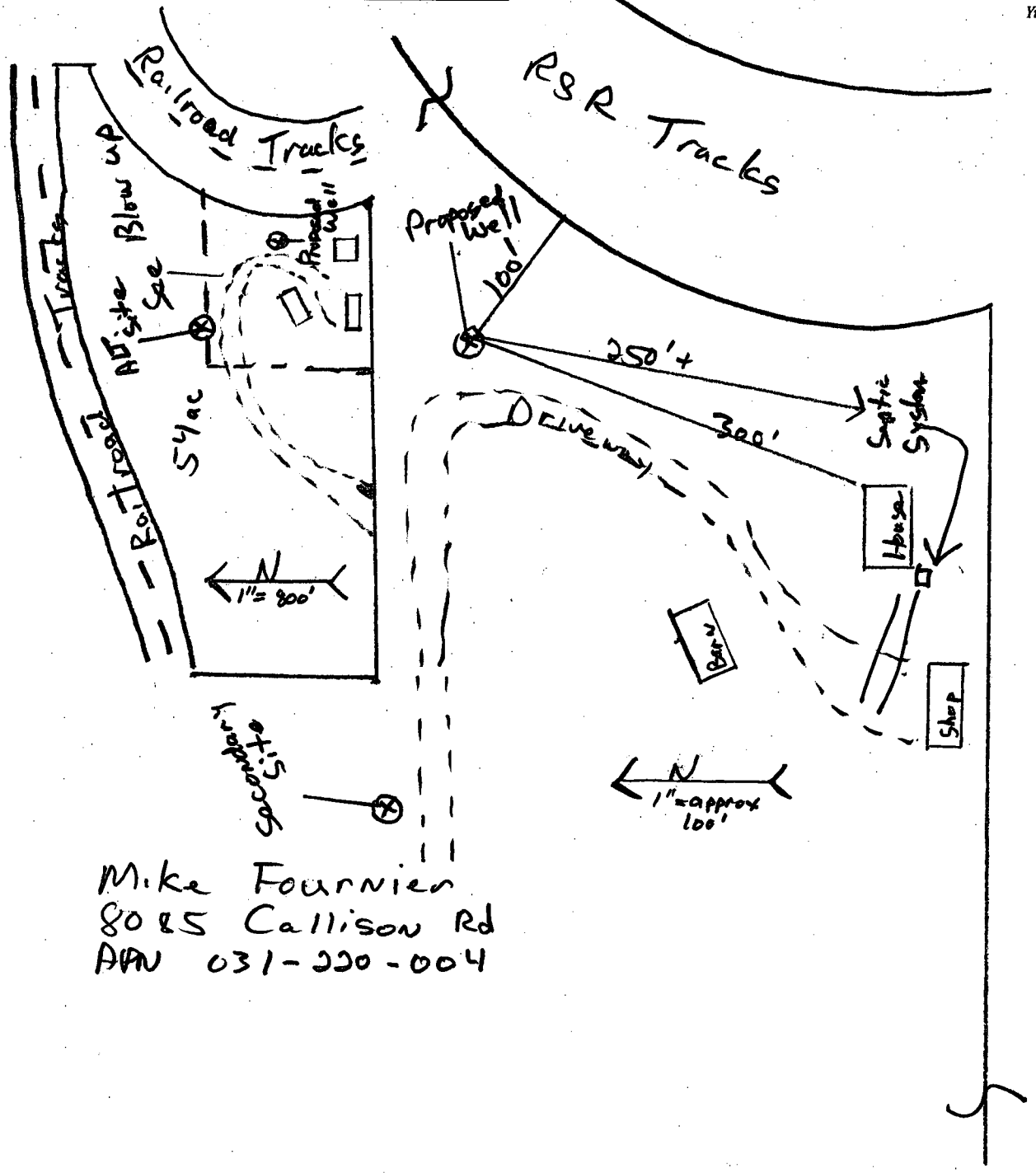
PETERS'
DRILLING &
PUMP SERVICE

P.O. Box 1546
Grass Valley, CA 95945
Grass Valley (530) 273-8136
FAX (530) 273-1213

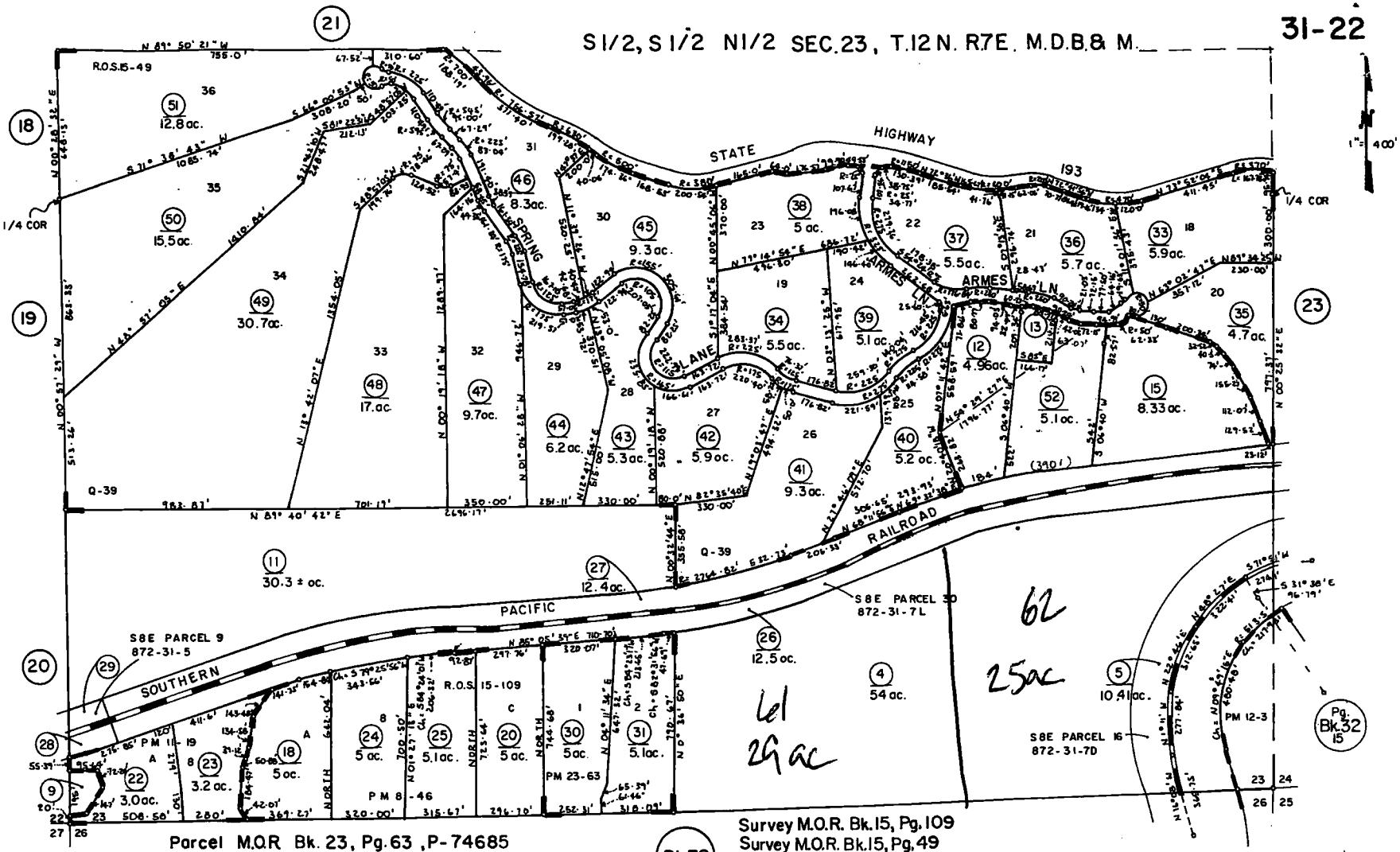
Colfax (530) 346-6210
Auburn (530) 888-7311
Lincoln (916) 645-9692
Yuba County (530) 751-9009

Contractors Lic. No. 456136

all Mtls
WP 7912
7/8/13



Mike Fournier
8085 Callison Rd
APN 031-220-004



Parcel M.O.R Bk. 23, Pg. 63, P-74685
Survey M.O.R. Bk. 8, Pg. 20
Parcel M.O.R. Bk. 12, Pg. 3, 72360
Parcel M.O.R. Bk. 11, Pg. 19, 72091
Parcel M.O.R. Bk. 9, Pg. 125, 72059
Parcel M.O.R. Bk. 8, Pg. 46, 71475
Dream Ranch Estates No. 3, M.O.R. Bk. Q, Pg. 39

Survey M.O.R. Bk. 15, Pg. 109
Survey M.O.R. Bk. 15, Pg. 49

07-07-95
09-28-89
PAGE REDRAWN

NOTE

This map was prepared for assessment purposes only, and is not intended to illustrate legal building sites or supercede local ordinances. Official information concerning size or use of any parcel should be obtained from recorded documents and local governing agencies.

Assessor's Map Bk. 31 Pg. - 22
County of Placer, Calif.

NOTE
Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

Search

Select Search Type

PAV - Environmental Health

Please enter desired search criteria

Dates

Start End

Assessors Parcel No

032-124-080-000

Applicant Name

Street Address

City

Search Clear

Results

Document Date	Document Name	Assessors Parc
12/11/2019	12/11/2019 - HISTORICAL - 4200	032-124-08(
11/24/2008	11/24/2008 - HISTORICAL - 4200	032-124-08(

Search

Select Search Type

PAV - Environmental Health

Please enter desired search criteria

Dates

Start End

Assessors Parcel No

031-220-061-000

Applicant Name

Street Address

City

Search Clear

Results

Document Date	Document Name	Assessors Parcel
3/19/2020	3/19/2020 - HISTORICAL - 4200	031-220-061-
4/3/2019	4/3/2019 - HISTORICAL - 4200	031-220-061-

Search

Select Search Type

PAV - Environmental Health

Please enter desired search criteria

Dates

Start End

Assessors Parcel No

031-220-062-000

Applicant Name

Street Address

City

Search Clear

Results

Document Date	Document Name	Assessors Parcel
3/19/2020	3/19/2020 - HISTORICAL - 4200	031-220-062-
1/24/2017	1/24/2017 - HISTORICAL - 4200	031-220-062-

Search

Select Search Type

PAV - Environmental Health

Please enter desired search criteria

Dates

Start End

Assessors Parcel No

032-124-058-000

Applicant Name

Street Address

City

Search Clear

Results

No documents found

Search

Select Search Type

PAV - Environmental Health

Please enter desired search criteria

Dates

Start End

Assessors Parcel No

032-124-079-000

Applicant Name

Street Address

City

Search Clear

Results

No documents found

Request #20-149

☑ CLOSED

As of March 25, 2020, 12:44am

Details

I would like to find out if the APCD has any records pertaining the following address in Pacer County:
7851 Callison Road
Penryn, CA 95663
APN: 032-124-058-000

Received

March 9, 2020 via web

Departments

Air Pollution Control District

Documents

(none)

Staff

Point of Contact

APCD Public Records

Timeline

Request Closed Public

Thank you for submitting a Public Records Request with Placer County Air Pollution Control District.

After a review of District files, we have found no records relating to the information outlined in your request. The District now considers this request complete.
If you have any questions or need additional information, please reply to this email, call (530) 745-2330, or submit another online public records request.

March 18, 2020, 10:33am

Department Assignment

Public

Air Pollution Control District

March 9, 2020, 10:36am

Request Opened

Public

Request received via web

March 9, 2020, 10:36am

Request #20-157

☑ CLOSED

As of March 25, 2020, 12:45am

Details

I would like to find out if the APCD has any records pertaining to the following addresses in Placer County:
7665 Callison Road (APN 031-220-062)
7615 Callison Road (APN 031-220-061)
7535 Ridgeview Lane (APN 032-124-080)

Received

March 10, 2020 via web

Departments

Air Pollution Control District

Documents

(none)

Staff

Point of Contact

APCD Public Records

Timeline

Request Closed Public

Thank you for submitting a Public Records Request with Placer County Air Pollution Control District.

After a review of District files, we have found no records relating to the information outlined in your request. The District now considers this request complete.
If you have any questions or need additional information, please reply to this email, call (530) 745-2330, or submit another online public records request.

March 18, 2020, 10:37am

Department Assignment

Public

Air Pollution Control District

March 10, 2020, 1:27pm

Request Opened

Public

Request received via web

March 10, 2020, 1:27pm

Request #20-152

☑ CLOSED

As of March 25, 2020, 12:36am

Details

I am completing an environmental site assessment for the below listed property in Penryn and wanted to find out if the Building Department has any records for this property (permits, COs, etc.) as far back as records go. Our office is located in Roseville and we can review these records in person or electronically.

7851 Callison Road
Penryn, CA 95663
APN: 032-124-058-000

Received
March 9, 2020 via web

Departments
Community Development: Building, Planning, Engineering

Documents

Staff

Point of Contact
Sue Colbert

Timeline

Request Published Public

March 13, 2020, 10:45am

Request Closed

Public

Records responsive to your request are now available. We were unable to locate the building permit for the original dwelling/commercial shell, as the County did not start issuing building permits until the mid-1940s to early 1950s; the County Assessor's Office estimates the year built as 1948. This request is now considered satisfied and closed.

March 13, 2020, 10:45am

Document(s) Released

Public

02 0045.pdf

March 13, 2020, 10:45am

Department Assignment

Public

Community Development: Building, Planning, Engineering

March 9, 2020, 11:57am

Request Opened

Public

Request received via web

March 9, 2020, 11:57am

Request #20-158

☑ CLOSED

As of March 25, 2020, 12:39am

Details

I would like to find out if the Placer County Community Building Division has any records pertaining to the following addresses in Placer County:
7665 Callison Road (APN 031-220-062)
7615 Callison Road (APN 031-220-061)
7535 Ridgeview Lane (APN 032-124-080)

Received

March 10, 2020 via web

Departments

Community Development: Building, Planning, Engineering

Documents

Staff

Point of Contact

Sue Colbert

Timeline

Request Published Public

March 13, 2020, 10:49am

Request Closed Public

Records responsive to your request are now available. 7615 CALLISON AND 7665 CALLISON USED TO BE THE SAME PARCEL; WE WERE UNABLE TO DETERMINE WHICH PROPERTY PERMIT 3907 BELONGED SO IS INCLUDED UNDER BOTH. This request is now considered satisfied and closed.

March 13, 2020, 10:49am

Document(s) Released Public

8065.pdf
6608.pdf
5354.tif
11079.pdf

March 13, 2020, 10:46am

Document(s) Released Public

3907.pdf
17-03846.pdf

March 13, 2020, 10:46am

Document(s) Released Public

3907.pdf
17-01300.pdf
17-02830.pdf

March 13, 2020, 10:46am

Department Assignment Public

Community Development: Building, Planning, Engineering

March 10, 2020, 1:30pm

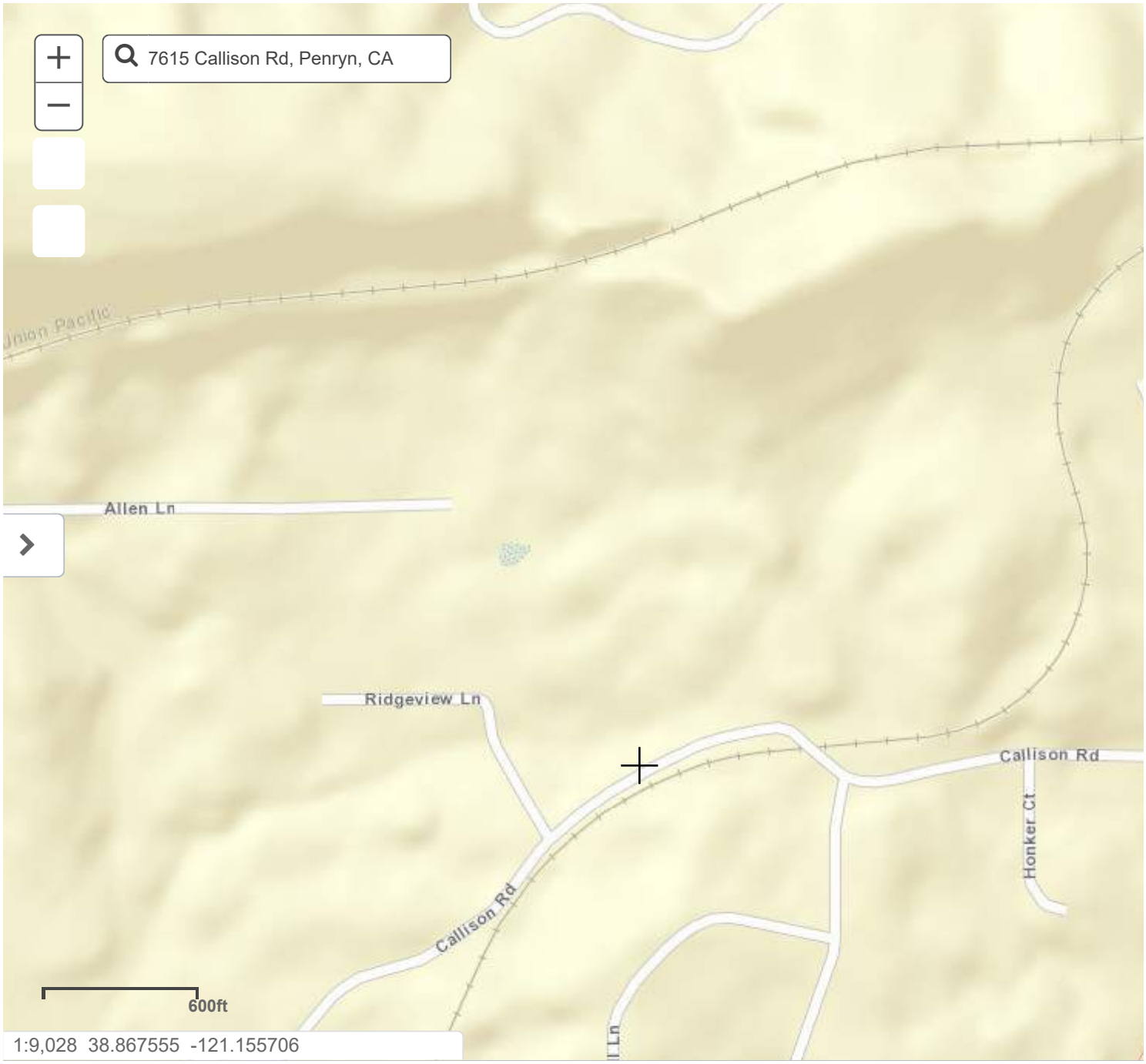
Request Opened Public

Request received via web

March 10, 2020, 1:30pm

Well Finder
CalGEM GIS

More Info | Help | ©



Department of Toxic Substances Control
Meredith Williams, Ph.D.
Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

Jared Blumenfeld
Secretary for
Environmental Protection

Gavin Newsom
Governor

Facility Search Results

Selection Criteria:

Facility:
Search on: Physical Address
Street: Callison
City: Penryn
Status: Active and Inactive
Sort Direction: asc
Sorted By: EPA ID
Records Found: 1

EPA ID Number	Name	Address	City	Zip
CAC002556570	SINCLAIR CONCRETE	7375 CALLISON RD	PENRYN	95663

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 03/25/2020

Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control
Meredith Williams, Ph.D.
Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

Gavin Newsom
Governor

Facility Search Results

Selection Criteria:

Facility:
Search on: Physical Address
Street: Ridgeview
City: Penryn
Status: Active and Inactive
Sort Direction: asc
Sorted By: EPA ID
Records Found: 1

EPA ID Number	Name	Address	City	Zip
CAC003053734	AUDREY HUBBARD	7528 RIDGEVIEW LANE	PENRYN	956639537

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Report Generation Date: 03/25/2020

Request #20-150

☑ CLOSED

As of March 25, 2020, 12:47am

Details

I am completing an environmental site assessment for the below listed property in Penryn and wanted to find out if the Fire Department has any records for this property that pertain to hazardous materials, underground/aboveground storage tanks, spills/releases, violations, or soil/groundwater contamination.
Our office is located in Roseville and we can review these records in person or electronically.

7851 Callison Road
Penryn, California 95663

Received
March 9, 2020 via web

Departments
Environmental Health

Documents

(none)

Staff

Point of Contact
Jeannette Peacock

Timeline

Request Closed

Public

Closing Response.

March 16, 2020, 11:42am

Request Published

Public

March 16, 2020, 11:42am

Department Assignment

Public

Environmental Health

March 9, 2020, 10:44am

Request Opened

Public

Request received via web

March 9, 2020, 10:44am

Request #20-171

☑ CLOSED

As of March 25, 2020, 12:46am

Details

Requesting any CUPA (including hazardous substance/chemical use, ASTs, USTs, etc), septic, and water well records available for the below addresses:
7665 Callison Road (APN 031-220-062)
7615 Callison Road (APN 031-220-061)
7535 Ridgeview Lane (APN 032-124-080)
Thank you.

Received

March 17, 2020 via web

Departments

Environmental Health

Documents

(none)

Staff

Point of Contact

Taunya Bisordi

Timeline

Request Published Public

March 19, 2020, 2:08pm

/

Request Closed

Public

Request fulfilled. Closing Response.

March 19, 2020, 2:08pm

Department Assignment

Public

Environmental Health

March 17, 2020, 4:15pm

Request Opened

Public

Request received via web

March 17, 2020, 4:15pm

Request Closed Hide

Public

Records responsive to your request are now available. We were unable to locate the building permit for the original dwelling/commercial shell, as the County did not start issuing building permits until the mid-1940s to early 1950s; the County Assessor's Office estimates the year built as 1948. This request is now considered satisfied and closed.

March 13, 2020, 10:45am

Balshor, Bailey

From: Placer County Public Records <support@nextrequest.com>
Sent: Thursday, March 19, 2020 2:08 PM
To: Balshor, Bailey
Subject: [External Message Added] Placer County public records request #20-171

-- Attach a non-image file and/or reply ABOVE THIS LINE with a message, and it will be sent to staff on this request. --

Placer County Public Records

Hi there

A message was sent to you regarding record request #20-171:

Thank you for submitting a Public Records Request with Placer County Environmental Health, the records you are seeking are already available online at https://ecmwebprod.placer.ca.gov/ehs2/!samples/sample-cq/index.html. This request is now considered satisfied and closed.

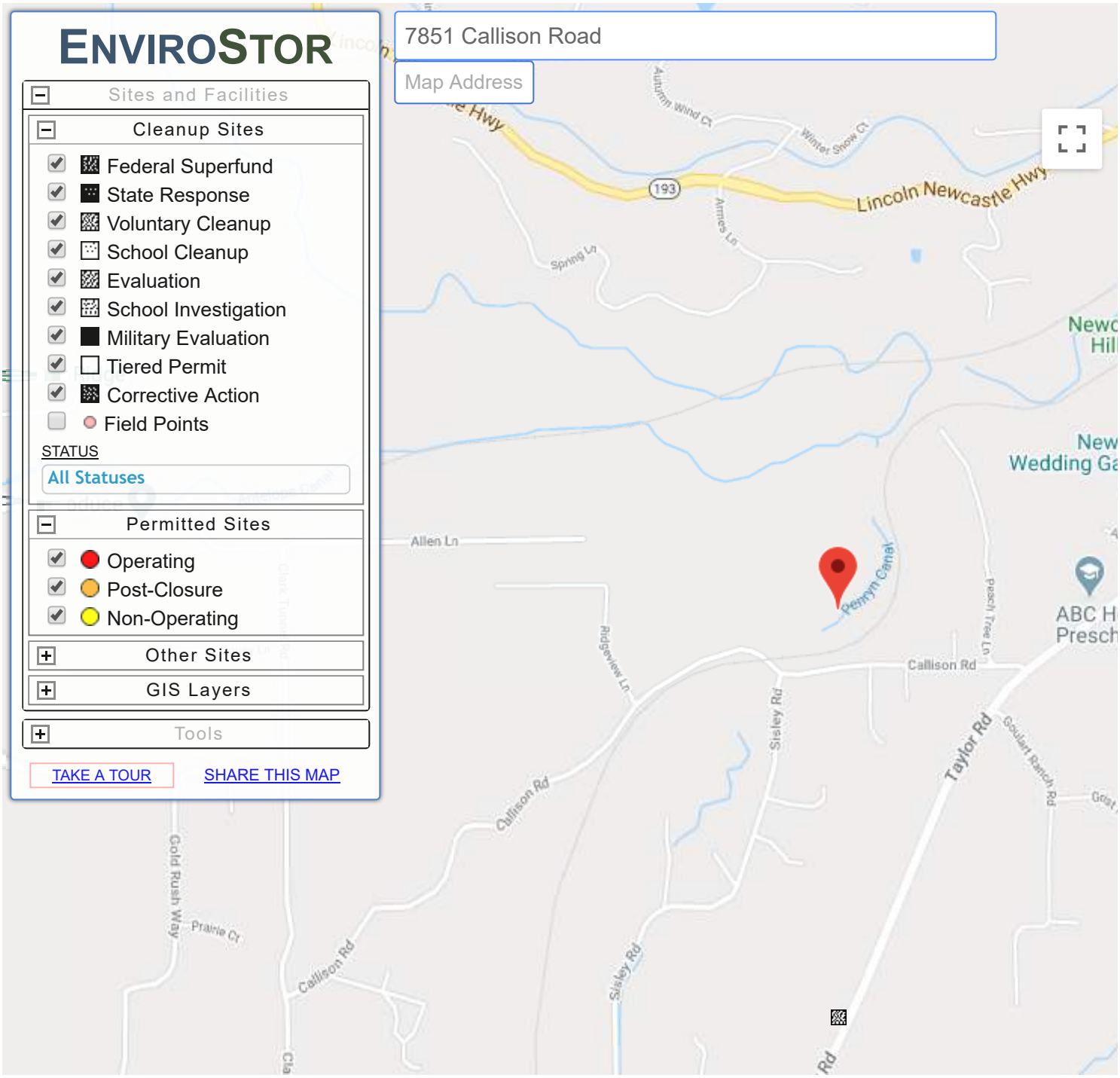
We do not have any CUPA related files, but if you follow the above link you will find our land files that are available online. Thank you.

View Request 20-171

http://placercounty.nextrequest.com/requests/20-171



POWERED BY NEXTREQUEST



SITES CURRENTLY VISIBLE ON MAP — 2 SITES LISTED — EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
SECRET RAVINE SCHOOL	NO ACTION REQUIRED	SCHOOL INVESTIGATION	KENTUCKY GREEN WAY	NEWCASTLE
YAMASHIRO PROPERTY	INACTIVE - NEEDS EVALUATION	VOLUNTARY CLEANUP	TAYLOR ROAD	PENRYN

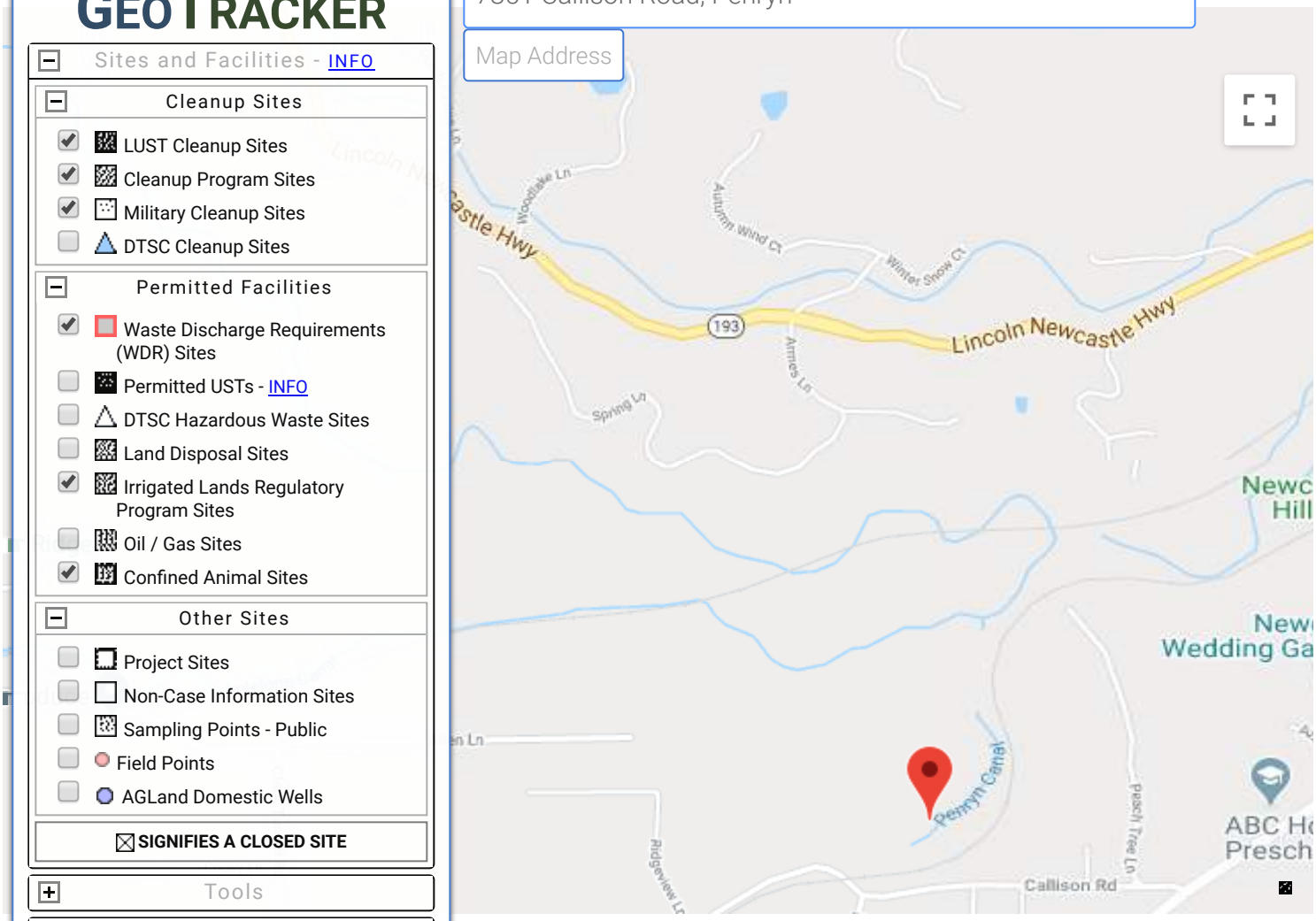
GEOTRACKER

7851 Callison Road, Penryn

Map Address

- Sites and Facilities - INFO
  - Cleanup Sites
    - [x] LUST Cleanup Sites
    - [x] Cleanup Program Sites
    - [x] Military Cleanup Sites
    - [ ] DTSC Cleanup Sites
  - Permitted Facilities
    - [x] Waste Discharge Requirements (WDR) Sites
    - [ ] Permitted USTs - INFO
    - [ ] DTSC Hazardous Waste Sites
    - [ ] Land Disposal Sites
    - [x] Irrigated Lands Regulatory Program Sites
    - [ ] Oil / Gas Sites
    - [x] Confined Animal Sites
  - Other Sites
    - [ ] Project Sites
    - [ ] Non-Case Information Sites
    - [ ] Sampling Points - Public
    - [ ] Field Points
    - [ ] AGLand Domestic Wells
  - ☒ SIGNIFIES A CLOSED SITE
- Tools
- Map Coverages

TAKE A TOUR VIEW ON GAMA





SITES CURRENTLY VISIBLE ON MAP

APPENDIX C: REGULATORY DATABASE REPORT

PARTNER

Lecavalier Cellars
7851 Callison Road
PENRYN, CA 95663

Inquiry Number: 5999404.2s
March 06, 2020

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	35
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

7851 CALLISON ROAD
PENRYN, CA 95663

COORDINATES

Latitude (North):	38.8695480 - 38˚ 52' 10.37''
Longitude (West):	121.1591180 - 121˚ 9' 32.82''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	659707.5
UTM Y (Meters):	4303703.0
Elevation:	780 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5629068 ROCKLIN, CA
Version Date:	2012
North Map:	5619714 GOLD HILL, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140713
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
7851 CALLISON ROAD
PENRYN, CA 95663

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	MAX BEDDES	7520 CALLISON RD	SWEEPS UST, HIST UST	Lower	412, 0.078, SSW
2	AFFORDABLE RV RENTAL	9994/9998/10002 HILL	CERS HAZ WASTE, CERS	Lower	715, 0.135, NE
3	PAGE RANCH	8085 CALLISON RD	HIST UST	Lower	1238, 0.234, SE
4	WELDING SHOP	2851 TAYLOR RD (AKA:	LUST, HIST CORTESE, CERS	Lower	1545, 0.293, SSE
5	MEDEIROS, MAMIE	1133 TAYLOR RD	LUST, HIST CORTESE, CA PLACER CO. MS, CERS	Lower	2285, 0.433, ESE
6	YAMASHIRO, TADAO	1511 SISLEY RD	LUST, SWEEPS UST, HIST UST, HIST CORTESE, CA...	Lower	2544, 0.482, South
7	YAMASHIRO PROPERTY	TAYLOR ROAD	ENVIROSTOR, VCP	Lower	3167, 0.600, South
8	SECRET RAVINE SCHOOL	KENTUCKY GREEN WAY	ENVIROSTOR, SCH, CERS	Higher	4499, 0.852, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CERS TANKS ---- California Environmental Reporting System (CERS) Tanks
CA FID UST ---- Facility Inventory Database

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---- RCRA - Non Generators / No Longer Regulated
FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations

FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
UXO ---- Unexploded Ordnance Sites
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
ECHO ---- Enforcement & Compliance History Information
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
CA BOND EXP. PLAN ---- Bond Expenditure Plan
Cortese ---- "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings ---- CUPA Resources List
DRYCLEANERS ---- Cleaner Facilities
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
HAZNET ---- Facility and Manifest Data
ICE ---- ICE
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
MINES ---- Mines Site Location Listing
CA PLACER CO. MS ---- Master List of Facilities
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
Notify 65 ---- Proposition 65 Records
UIC ---- UIC Listing
UIC GEO ---- UIC GEO (GEOTRACKER)
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
PROJECT ---- PROJECT (GEOTRACKER)
WDR ---- Waste Discharge Requirements Listing
CIWQS ---- California Integrated Water Quality System
CERS ---- CERS
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
HWTS ---- Hazardous Waste Tracking System
MINES MRDS ---- Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/28/2019 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SECRET RAVINE SCHOOL Facility Id: 31010012 Status: No Action Required	***KENTUCKY GREEN WAY***	***E 1/2 - 1 (0.852 mi.)***	***8***	***31***

Lower Elevation	Address	Direction / Distance	Map ID	Page
YAMASHIRO PROPERTY Facility Id: 60002241 Status: Inactive - Needs Evaluation	***TAYLOR ROAD***	***S 1/2 - 1 (0.600 mi.)***	***7***	***28***

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WELDING SHOP	***2851 TAYLOR RD (AKA:***	***SSE 1/4 - 1/2 (0.293 mi.)***	***4***	***15***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/09/2019 Status: Completed - Case Closed Status: Case Closed Global Id: T0606100249				
MEDEIROS, MAMIE	***1133 TAYLOR RD***	***ESE 1/4 - 1/2 (0.433 mi.)***	***5***	***18***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/09/2019 Status: Completed - Case Closed Status: Case Closed Global Id: T0606100199				
YAMASHIRO, TADAO	***1511 SISLEY RD***	***S 1/4 - 1/2 (0.482 mi.)***	***6***	***24***
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/09/2019 Status: Completed - Case Closed Status: Case Closed Global Id: T0606100224				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/21/2019 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AFFORDABLE RV RENTAL	***9994/9998/10002 HILL***	***NE 1/8 - 1/4 (0.135 mi.)***	***2***	***10***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no

longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MAX BEDDES	***7520 CALLISON RD***	***SSW 0 - 1/8 (0.078 mi.)***	***1***	***9***
Status: A Tank Status: A Comp Number: 52456				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MAX BEDDES	***7520 CALLISON RD***	***SSW 0 - 1/8 (0.078 mi.)***	***1***	***9***
Facility Id: 00000052456				
PAGE RANCH	8085 CALLISON RD	SE 1/8 - 1/4 (0.234 mi.)	3	15
Facility Id: 00000053608				

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

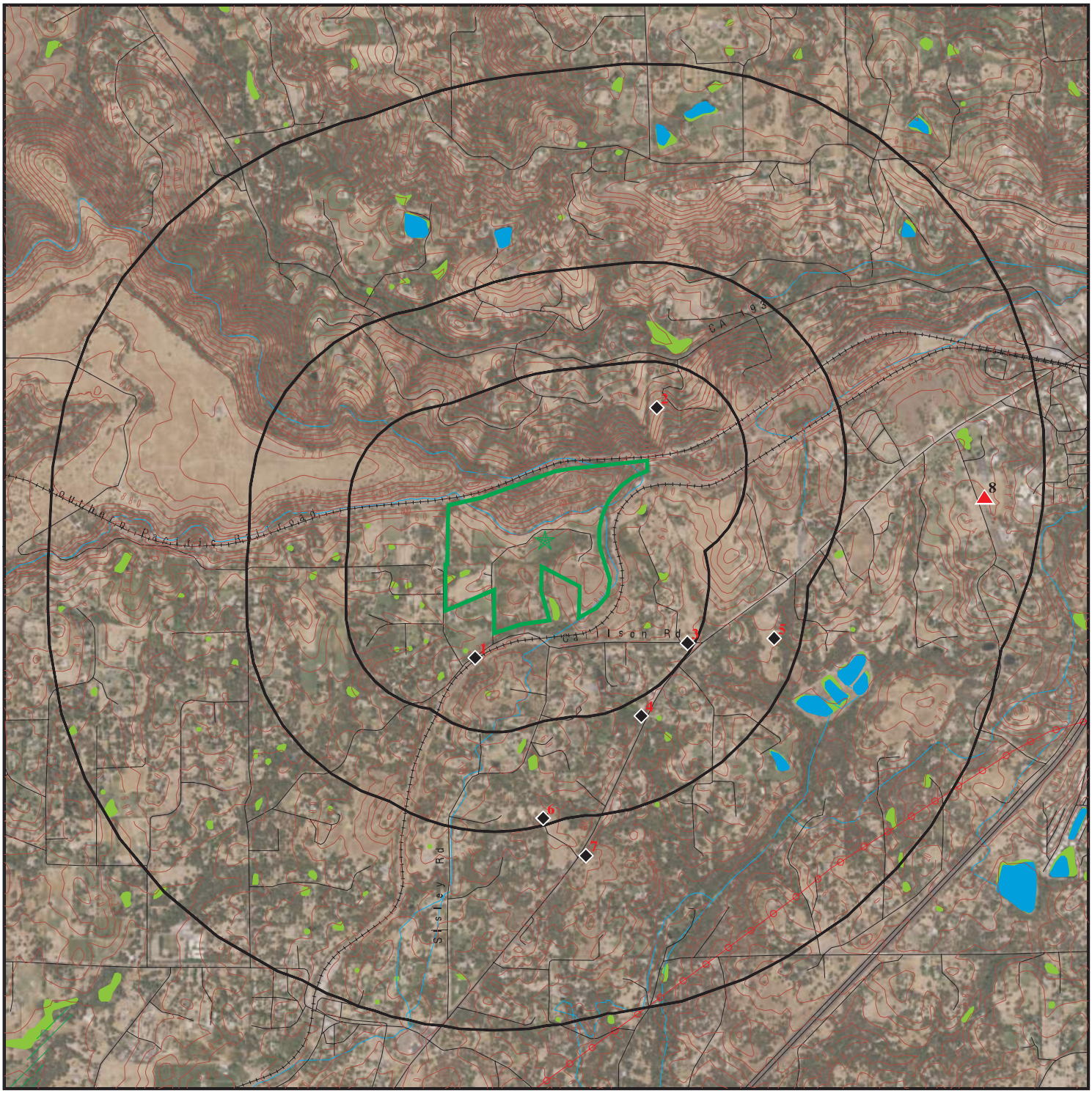
A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WELDING SHOP	***2851 TAYLOR RD (AKA:***	***SSE 1/4 - 1/2 (0.293 mi.)***	***4***	***15***
Reg Id: 310307				
MEDEIROS, MAMIE	***1133 TAYLOR RD***	***ESE 1/4 - 1/2 (0.433 mi.)***	***5***	***18***
Reg Id: 310248				
YAMASHIRO, TADAO	***1511 SISLEY RD***	***S 1/4 - 1/2 (0.482 mi.)***	***6***	***24***
Reg Id: 310276				

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5999404.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

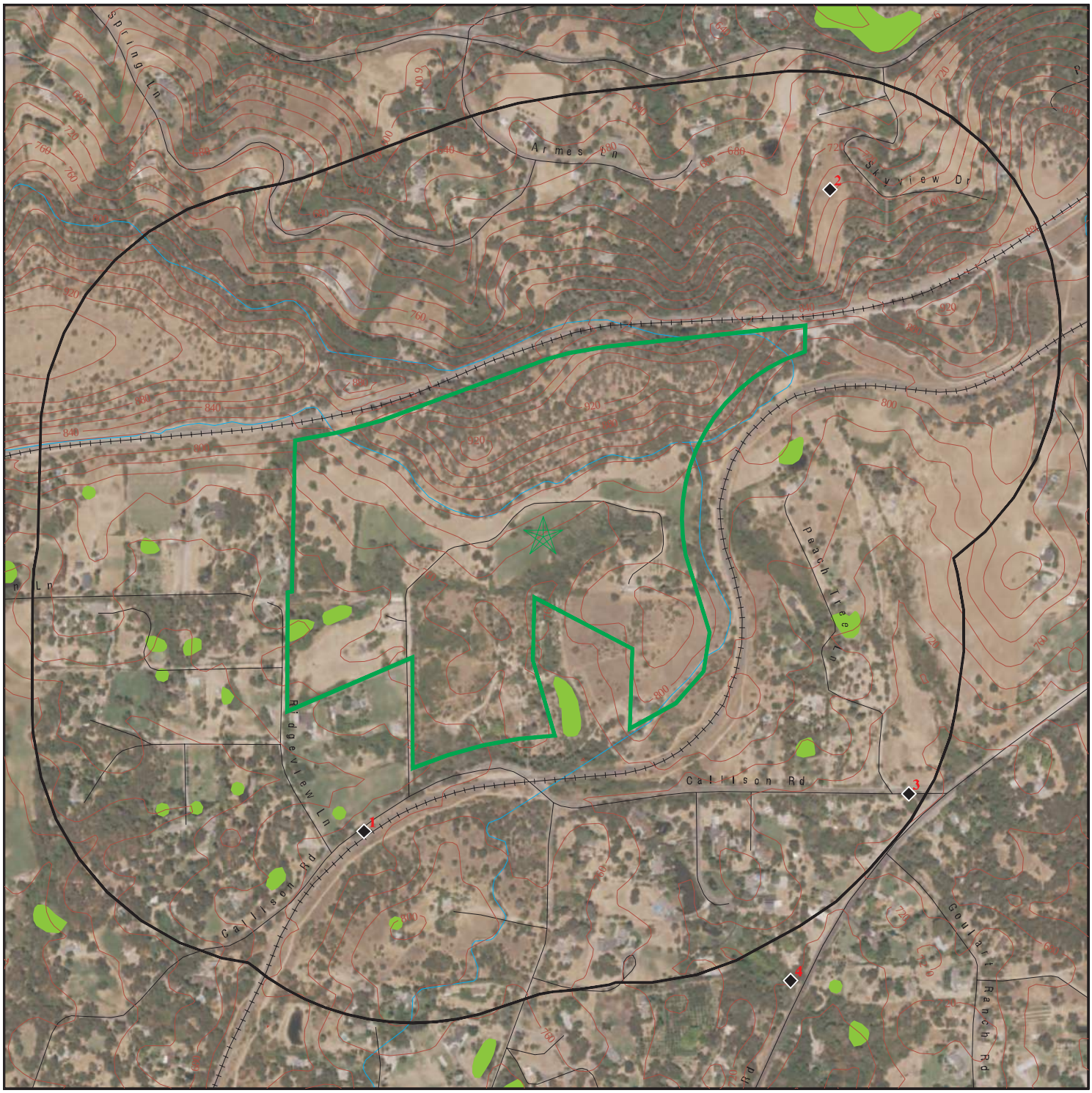
N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Lecavalier Cellars	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	7851 Callison Road PENRYN CA 95663	CONTACT:	Aimee Tamayo
		INQUIRY #:	5999404.2s
LAT/LONG:	38.869548 / 121.159118	DATE:	March 06, 2020 12:50 pm

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DETAIL MAP - 5999404.2S



0 1/8 1/4 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Lecavalier Cellars	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	7851 Callison Road PENRYN CA 95663	CONTACT:	Aimee Tamayo
		INQUIRY #:	5999404.2s
LAT/LONG:	38.869548 / 121.159118	DATE:	March 06, 2020 12:51 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	3	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	1	NR	NR	NR	1
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	1	NR	NR	NR	2
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	3	NR	NR	3
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
CA PLACER CO. MS	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	2	2	6	2	0	12

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SSW
< 1/8
0.078 mi.
412 ft.

MAX BEDDES
7520 CALLISON RD
PENRYN, CA 95663

SWEEPS UST
HIST UST

U001613448
N/A

Relative:
Lower

Actual:
728 ft.

SWEEPS UST:

Name:	MAX BEDDES
Address:	7520 CALLISON RD
City:	PENRYN
Status:	Active
Comp Number:	52456
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	31-000-052456-000001
Tank Status:	A
Capacity:	550
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Name:	MAX BEDDES
Address:	7520 CALLISON RD
City:	PENRYN
Status:	Active
Comp Number:	52456
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	31-000-052456-000002
Tank Status:	A
Capacity:	Not reported
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

HIST UST:

Name:	MAX BEDDES
Address:	7520 CALLISON RD
City,State,Zip:	PENRYN, CA 95663
File Number:	0001F2C4
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F2C4.pdf
Region:	STATE
Facility ID:	00000052456
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	9166632995

MAX BEDDES (Continued) **U001613448**

Owner Name:	MAX BEDDES
Owner Address:	7520 CALLISON RD.
Owner City,St,Zip:	PENRYN, CA 95663
Total Tanks:	0002
Tank Num:	001
Container Num:	1
Year Installed:	1975
Tank Capacity:	00000550
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Visual, None
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

---

2 **AFFORDABLE RV RENTALS INC** **CERS HAZ WASTE** **S121770734**
NE **9994/9998/10002 HILLVIEW ROAD** **CERS** **N/A**
1/8-1/4 **NEWCASTLE, CA 95658**
0.135 mi.
715 ft.

Relative: **Lower**

Actual: **755 ft.**

CERS HAZ WASTE:

Name:	AFFORDABLE RV RENTALS INC
Address:	9994/9998/10002 HILLVIEW ROAD
City,State,Zip:	NEWCASTLE, CA 95658
Site ID:	384282
CERS ID:	10472590
CERS Description:	Hazardous Waste Generator

CERS:

Name:	AFFORDABLE RV RENTALS INC
Address:	9994/9998/10002 HILLVIEW ROAD
City,State,Zip:	NEWCASTLE, CA 95658
Site ID:	384282
CERS ID:	10472590
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-09-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Reviewed the DTSC EPA ID profile; EPA ID number is currently ACTIVE. Reviewed hazardous waste manifests. Hazardous waste generated includes waste oil, waste antifreeze, used absorbent, drained oil filters. Hazardous waste haulers are Safety-Kleen and World Oil. Spent lead acid batteries are exchanged for the core charge. Weekly inspections of hazardous waste containers are conducted.

AFFORDABLE RV RENTALS INC (Continued) **S121770734**

Eval Division:	Placer County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-28-2013
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site for the Hazardous Material Business Plan (HMBP) inspection. Verified all aspects of the HMBP. Provided the County's California Environmental Reporting System (CERS) guidance letter to the business owner. Facility must submit all environmental forms to CERS asap.
Eval Division:	Placer County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-06-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site to conduct the Hazardous Materials Business Plan (HMBP) program inspection. Reviewed HMBP forms including business activities, business owner/operator, facility inventory, facility maps and the consolidated safety plan. Operator stated that no reportable releases have occurred in the previous year; did not observe signs of an obvious release. Material reported for 9994, 9998, 10002 Hillview Road locations; all locations are owned and operated by the same owner on adjacent properties. Main office is located at 9994 Hillview Road. Reminders: 1. Operator will complete 2016 training by December 2016.
Eval Division:	Placer County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-06-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site to conduct the Hazardous Waste Generator (HWG) Program inspection. Reviewed the DTSC EPA ID profile. Reviewed hazardous waste receipts and manifests; business is a Small Quantity Generator (SQG). Hazardous waste generated includes waste oil, waste antifreeze, absorbent, non-metallic filters, and drained used oil filters. Hazardous waste haulers are Safety-Kleen and PSC Environmental. Spent lead acid batteries are exchanged for the core charge through "Interstate Batteries" on weekly basis. Observed a bench-top parts washing system. Operator stated that this business does not process appliances or work on refrigeration units. Business generates <220 lbs of universal waste per month on average; did not observe accumulation of universal waste on this date. Reminders: 1. When cleaning out the parts washer, ensure to manage any waste properly (sludge or liquid).
Eval Division:	Placer County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-08-2015
Violations Found:	No

AFFORDABLE RV RENTALS INC (Continued) **S121770734**

Eval Type:	Routine done by local agency
Eval Notes:	On site to conduct the Hazardous Materials Business Plan (HMBP) program inspection. Reviewed and verified HMBP forms including business activities, business owner/operator, facility inventory, facility maps and the consolidated safety plan. Reminders: 1. Re-submit all HMBP forms to California Environmental Reporting System (CERS) at the minimum of once per year or within 30 days of any major changes. 2. Remember to write down the training date on the training documentation sheet; document HMBP program training annually.
Eval Division:	Placer County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-09-2018
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Reviewed HMBP forms including: business activities, business owner/operator, facility inventory, facility maps and the consolidated safety plan. Operator stated that no reportable releases have occurred in the previous year; did not observe signs of an obvious release. Employee training completed, conducted 3/28/17.
Eval Division:	Placer County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-25-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site for the Hazardous Waste Generator (HWG) inspection. Reviewed the DTSC EPA ID printout; EPA ID number is active. Reviewed hazardous waste receipts/manifests for the previous three years. Business generates used oil, used antifreeze, used drained oil filters, and used absorbent. AES Environmental picks up used oil; Safety-Kleen picks up all other hazardous waste. Business is a Small Quantity Generator (SQG). Business generates spent lead acid batteries which are exchanged by Interstate once a week. Hazardous waste is stored on top of a containment pallet; used oil tank is double walled. Reminders and Corrected on Site (COS) action items: 1. Ensure to dispose of all hazardous waste within 6 months of generation. 2. Ensure that all containers are properly closed (caps on, funnels out, etc) when no in use. 3. Ensure to conduct AND document weekly inspections of the hazardous waste storage area (provided an inspection template to operator on this [Truncated]
Eval Division:	Placer County Environmental Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-08-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	On site to conduct the Hazardous Waste Generator (HWG) program inspection. Reviewed the DTSC EPA ID profile. Reviewed hazardous waste receipts / manifests; business is a Small Quantity Generator (SQG). Hazardous waste generated is waste oil, antifreeze, absorbent,

AFFORDABLE RV RENTALS INC (Continued) **S121770734**

non-metallic filters and drained used oil filters. Hazardous waste haulers are Safety-Kleen and PSC Environmental. Spent lead acid batteries are exchanged for cores by "Interstate" on weekly basis and <10 spent lead acid batteries are managed at any one time. Did not observe accumulation of universal waste at this time. Reminders: 1. All hazardous waste is disposed of every 180 days (3 months); properly drained used oil filters may be disposed of once per year (if less than a ton is generated).

Eval Division: Placer County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-25-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: On site for the Hazardous Materials Business Plan (HMBP) inspection. Reviewed all HMBP forms and documents including: business activities, business owner/operator, facility inventory, facility maps, contingency plan and training plan. Operator re-submitted all required HMBP forms with updated information to California Environmental Reporting System (CERS) on this date. Business has a repair shop ("upper shop") which stores reportable quantities of hazardous materials and waste; new inventory submitted via CERS. Reminders and Corrected on Site (COS) action items: 1. Remember to resubmit all HMBP forms to CERS at the minimum of once per year or within 30 days of any significant changes (hazmat/waste inventory changes, etc). 2. Remember to conduct AND document refresher training for all appropriate employees (provided documentation sheet to operator on this date).
Eval Division: Placer County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Affiliation:
Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 9994 Hillview Road
Affiliation City: Newcastle
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95658
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation
Entity Name: AFFORDABLE RV RENTALS INC
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District
Entity Name: Placer County Env Health
Entity Title: Not reported

AFFORDABLE RV RENTALS INC (Continued) **S121770734**

Affiliation Address:	3091 County Center Drive
Affiliation City:	Auburn
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95603
Affiliation Phone:	(530) 745-2300
Affiliation Type Desc:	Identification Signer
Entity Name:	Dora Lemke
Entity Title:	PRESIDENT
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	DORA LEMKE
Entity Title:	Not reported
Affiliation Address:	9994 Hillview Rd
Affiliation City:	Newcastle
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95658
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	DORA LEMKE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 425-2310
Affiliation Type Desc:	Property Owner
Entity Name:	DAN BALDONI
Entity Title:	Not reported
Affiliation Address:	9998 HILLVIEW ROAD
Affiliation City:	NEWCASTLE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95658
Affiliation Phone:	(530) 885-5210
Affiliation Type Desc:	Document Preparer
Entity Name:	Dora Lemke
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

AFFORDABLE RV RENTALS INC (Continued) **S121770734**

Affiliation Type Desc:	Legal Owner
Entity Name:	DORA LEMKE
Entity Title:	Not reported
Affiliation Address:	9994 Hillview Road
Affiliation City:	Newcastle
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95658
Affiliation Phone:	(530) 889-8174

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3 **PAGE RANCH** **HIST UST** **U001613354**
SE **8085 CALLISON RD** **N/A**
1/8-1/4 **NEWCASTLE, CA 95658**
0.234 mi.
1238 ft.

Relative: **Lower**
Actual: **706 ft.**

HIST UST:

Name:	PAGE RANCH
Address:	8085 CALLISON RD
City,State,Zip:	NEWCASTLE, CA 95658
File Number:	0001F207
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F207.pdf
Region:	STATE
Facility ID:	00000053608
Facility Type:	Other
Other Type:	RANCH
Contact Name:	GENEVIEVE PAGE
Telephone:	9166633684
Owner Name:	EUGENE A. PAGE & GENEVIEVE PAG
Owner Address:	8085 CALLISON RD.
Owner City,St,Zip:	NEWCASTLE, CA 95658
Total Tanks:	0001
Tank Num:	001
Container Num:	PI
Year Installed:	1980
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

Click here for Geo Tracker PDF:

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4 **WELDING SHOP** **LUST** **S105025539**
SSE **2851 TAYLOR RD (AKA: 2871)** **HIST CORTESE** **N/A**
1/4-1/2 **PENRYN, CA 95663** **CERS**
0.293 mi.
1545 ft.

Relative: **Lower**
Actual: **701 ft.**

LUST:

Name:	WELDING SHOP
Address:	2851 TAYLOR RD (AKA: 2871)
City,State,Zip:	PENRYN, CA 95663
Lead Agency:	PLACER COUNTY

WELDING SHOP (Continued) **S105025539**

Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606100249
Global Id:	T0606100249
Latitude:	38.8441706
Longitude:	-121.1694562
Status:	Completed - Case Closed
Status Date:	12/26/1997
Case Worker:	Not reported
RB Case Number:	310307
Local Agency:	PLACER COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0606100249
Contact Type:	Regional Board Caseworker
Contact Name:	PAUL SANDERS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	psanders@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606100249
Contact Type:	Local Agency Caseworker
Contact Name:	WEST BOURGAULT
Organization Name:	PLACER COUNTY
Address:	3091 County Center Drive, Suite 180
City:	AUBURN
Email:	wbourgau@placer.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0606100249
Action Type:	Other
Date:	07/07/1992
Action:	Leak Reported

Global Id:	T0606100249
Action Type:	Other
Date:	07/07/1992
Action:	Leak Discovery

Global Id:	T0606100249
Action Type:	ENFORCEMENT
Date:	12/26/1997
Action:	Closure/No Further Action Letter

LUST:

Global Id:	T0606100249
Status:	Open - Case Begin Date
Status Date:	07/07/1992

Global Id:	T0606100249

WELDING SHOP (Continued) **S105025539**

Status: Open - Site Assessment
Status Date: 07/07/1992

Global Id: T0606100249
Status: Completed - Case Closed
Status Date: 12/26/1997

LUST REG 5:
Name: WELDING SHOP
Address: 2851 TAYLOR RD (AKA: 2871)
City: PENRYN
Region: 5
Status: Case Closed
Case Number: 310307
Case Type: Soil only
Substance: GASOLINE
Staff Initials: PRS
Lead Agency: Local
Program: LUST
MTBE Code: N/A

HIST CORTESE:
edr_fname: WELDING SHOP
edr_fadd1: 28512871 TAYLOR RD
City,State,Zip: PENRYN, CA 95663
Region: CORTESE
Facility County Code: 31
Reg By: LTNKA
Reg Id: 310307

CERS:
Name: WELDING SHOP
Address: 2851 TAYLOR RD (AKA: 2871)
City,State,Zip: PENRYN, CA 95663
Site ID: 250869
CERS ID: T0606100249
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: West Bourgault - PLACER COUNTY
Entity Title: Not reported
Affiliation Address: 3091 County Center Drive, Suite 180
Affiliation City: AUBURN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: PAUL SANDERS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA

WELDING SHOP (Continued) **S105025539**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

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5 **MEDEIROS, MAMIE** **LUST** **S101300257**
ESE **1133 TAYLOR RD** **HIST CORTESE** **N/A**
1/4-1/2 **NEWCASTLE, CA 95658** **CA PLACER CO. MS**
0.433 mi. **CERS**
2285 ft.

Relative:
Lower

Actual:
685 ft.

LUST:
Name: FERREIRA PROPERTY
Address: 1133 TAYLOR RD
City,State,Zip: NEWCASTLE, CA 95658
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606100199
Global Id: T0606100199
Latitude: 38.865844
Longitude: -121.148587
Status: Completed - Case Closed
Status Date: 10/18/2006
Case Worker: PRS
RB Case Number: 310248
Local Agency: PLACER COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0606100199
Contact Type: Regional Board Caseworker
Contact Name: PAUL SANDERS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: psanders@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606100199
Contact Type: Local Agency Caseworker
Contact Name: WEST BOURGAULT
Organization Name: PLACER COUNTY
Address: 3091 County Center Drive, Suite 180
City: AUBURN
Email: wbourgau@placer.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0606100199
Action Type: Other
Date: 04/01/1986
Action: Leak Reported

Global Id: T0606100199

MEDEIROS, MAMIE (Continued) **S101300257**

Action Type: RESPONSE
Date: 10/31/2006
Action: Unknown

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/20/2000
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 03/11/2003
Action: * Historical Enforcement

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 11/21/2002
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 07/24/2002
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 02/07/2001
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 04/17/2002
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 06/24/2003
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/22/2003
Action: Site Visit / Inspection / Sampling

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 02/17/2003
Action: File review

Global Id: T0606100199
Action Type: RESPONSE
Date: 03/10/2006
Action: Other Report / Document

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/15/2003

MEDEIROS, MAMIE (Continued) **S101300257**

Action: Warning Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 03/27/2003
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 06/02/2003
Action: * Historical Enforcement

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 07/29/2004
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 04/13/2005
Action: Site Visit / Inspection / Sampling

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 01/04/2006
Action: Warning Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 07/25/2005
Action: * Historical Enforcement

Global Id: T0606100199
Action Type: Other
Date: 01/01/1986
Action: Leak Discovery

Global Id: T0606100199
Action Type: RESPONSE
Date: 01/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 12/05/2003
Action: Soil and Water Investigation Report

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/03/2005
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 04/06/2005
Action: * Historical Enforcement

MEDEIROS, MAMIE (Continued) **S101300257**

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 07/20/2006
Action: Site Visit / Inspection / Sampling

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 03/22/2006
Action: * Historical Enforcement

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 08/15/2006
Action: Staff Letter

Global Id: T0606100199
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 10/30/2004
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 12/05/2003
Action: Soil and Water Investigation Report

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/18/2006
Action: Closure/No Further Action Letter

Global Id: T0606100199
Action Type: RESPONSE
Date: 04/15/2005
Action: Request for Closure

Global Id: T0606100199
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 03/10/2006
Action: Other Report / Document

Global Id: T0606100199
Action Type: ENFORCEMENT

MEDEIROS, MAMIE (Continued) **S101300257**

Date: 07/17/2002
Action: File review

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 11/14/2002
Action: File review

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 05/02/2000
Action: Staff Letter

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 10/20/2000
Action: * Historical Enforcement

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 08/15/2006
Action: Technical Correspondence / Assistance / Other

Global Id: T0606100199
Action Type: ENFORCEMENT
Date: 07/26/2005
Action: Staff Letter

Global Id: T0606100199
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0606100199
Action Type: RESPONSE
Date: 03/10/2006
Action: Fact Sheets - Public Participation

LUST:
Global Id: T0606100199
Status: Open - Case Begin Date
Status Date: 01/01/1986

Global Id: T0606100199
Status: Open - Site Assessment
Status Date: 03/19/1999

Global Id: T0606100199
Status: Open - Site Assessment
Status Date: 08/31/1999

Global Id: T0606100199
Status: Open - Remediation
Status Date: 07/21/2003

Global Id: T0606100199
Status: Open - Verification Monitoring

MEDEIROS, MAMIE (Continued) **S101300257**

Status Date: 01/01/2004

Global Id: T0606100199
Status: Completed - Case Closed
Status Date: 10/18/2006

LUST REG 5:
Name: FERREIRA PROPERTY
Address: 1133 TAYLOR RD
City: NEWCASTLE
Region: 5
Status: Case Closed
Case Number: 310248
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: PRS
Lead Agency: Regional
Program: LUST
MTBE Code: 1

HIST CORTESE:
edr_fname: FERREIRA PROPERTY
edr_fadd1: 1133 TAYLOR
City,State,Zip: NEWCASTLE, CA 95658
Region: CORTESE
Facility County Code: 31
Reg By: LTNKA
Reg Id: 310248

PLACER CO. MS:
Name: MEDEIROS, MAMIE
Address: 1133 TAYLOR RD
City,State,Zip: NEWCASTLE, CA 95658
Facility ID: FA0003040
Facility Status: Closed
Program Element Code: 2304
Program: UNDERGROUND STORAGE TANKS - 4 TANKS
Record Num: PR0004635
District Code: 53
Decode for Fstatus: Closed

Name: MEDEIROS, MAMIE
Address: 1133 TAYLOR RD
City,State,Zip: NEWCASTLE, CA 95658
Facility ID: FA0003040
Facility Status: Closed
Program Element Code: 2350
Program: SITE CLEAN-UP - MITIGATION - HOURLY
Record Num: PR0007108
District Code: 53
Decode for Fstatus: Closed

CERS:
Name: FERREIRA PROPERTY

MEDEIROS, MAMIE (Continued) **S101300257**

Address: 1133 TAYLOR RD
City,State,Zip: NEWCASTLE, CA 95658
Site ID: 195054
CERS ID: T0606100199
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: PAUL SANDERS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title: Not reported
Affiliation Address: 11020 SUN CENTER DRIVE #200
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker
Entity Name: West Bourgault - PLACER COUNTY
Entity Title: Not reported
Affiliation Address: 3091 County Center Drive, Suite 180
Affiliation City: AUBURN
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

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6 **YAMASHIRO, TADAO** **LUST** **S101331755**
South **1511 SISLEY RD** **SWEEPS UST** **N/A**
1/4-1/2 **PENRYN, CA 95663** **HIST UST**
0.482 mi. **HIST CORTESE**
2544 ft. **CA PLACER CO. MS**
CERS

Relative:
Lower

Actual:
717 ft.

LUST:
Name: PRIVATE RESIDENCE
Address: PRIVATE RESIDENCE
City,State,Zip: PENRYN, CA 95663
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606100224
Global Id: T0606100224
Latitude: 38.859479
Longitude: -121.159215
Status: Completed - Case Closed
Status Date: 08/21/2001
Case Worker: PRS
RB Case Number: 310276
Local Agency: PLACER COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0606100224
Contact Type: Regional Board Caseworker

YAMASHIRO, TADAO (Continued) **S101331755**

Contact Name: PAUL SANDERS
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)
Address: 11020 SUN CENTER DRIVE #200
City: RANCHO CORDOVA
Email: psanders@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606100224
Contact Type: Local Agency Caseworker
Contact Name: WEST BOURGAULT
Organization Name: PLACER COUNTY
Address: 3091 County Center Drive, Suite 180
City: AUBURN
Email: wbourgau@placer.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0606100224
Action Type: Other
Date: 12/09/1993
Action: Leak Reported

Global Id: T0606100224
Action Type: ENFORCEMENT
Date: 11/13/2000
Action: Staff Letter

Global Id: T0606100224
Action Type: ENFORCEMENT
Date: 04/04/2000
Action: Staff Letter

Global Id: T0606100224
Action Type: Other
Date: 11/03/1993
Action: Leak Discovery

Global Id: T0606100224
Action Type: ENFORCEMENT
Date: 09/19/2000
Action: Staff Letter

Global Id: T0606100224
Action Type: ENFORCEMENT
Date: 09/19/2000
Action: * Historical Enforcement

LUST:
Global Id: T0606100224
Status: Open - Case Begin Date
Status Date: 11/03/1993

Global Id: T0606100224
Status: Open - Site Assessment
Status Date: 12/09/1993

YAMASHIRO, TADAO (Continued) **S101331755**

Global Id: T0606100224
Status: Completed - Case Closed
Status Date: 08/21/2001

LUST REG 5:
Name: YAMASHIRO, TADAO
Address: 1511 SISLEY RD
City: PENRYN
Region: 5
Status: Case Closed
Case Number: 310276
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: PRS
Lead Agency: Regional
Program: LUST
MTBE Code: 0

SWEEPS UST:
Name: TADAO YAMASHIRO
Address: 1511 SISLEY RD
City: PENRYN
Status: Not reported
Comp Number: 43055
Number: Not reported
Board Of Equalization: 44-035423
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 31-000-043055-000001
Tank Status: Not reported
Capacity: 550
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: 1

HIST UST:
Name: TWIN OAKS ORCHARD
Address: 1511 SISLEY ROAD
City,State,Zip: PENRYN, CA 95663
File Number: 0001F3A4
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F3A4.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

YAMASHIRO, TADAO (Continued) **S101331755**

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

HIST CORTESE:

edr_fname:	YAMASHIRO, TADAO
edr_fadd1:	1511 SISLEY
City,State,Zip:	PENRYN, CA 95663
Region:	CORTESE
Facility County Code:	31
Reg By:	LTNKA
Reg Id:	310276

PLACER CO. MS:

Name:	YAMASHIRO, TADAO
Address:	1511 SISLEY RD
City,State,Zip:	PENRYN, CA 95663
Facility ID:	FA0003143
Facility Status:	Closed
Program Element Code:	2301
Program:	UNDERGROUND STORAGE TANK - 1 TANK
Record Num:	PR0004803
District Code:	53
Decode for Fstatus:	Closed

Name:	YAMASHIRO, TADAO
Address:	1511 SISLEY RD
City,State,Zip:	PENRYN, CA 95663
Facility ID:	FA0003143
Facility Status:	Closed
Program Element Code:	2350
Program:	SITE CLEAN-UP - MITIGATION - HOURLY
Record Num:	PR0004963
District Code:	53
Decode for Fstatus:	Closed

CERS:

Name:	PRIVATE RESIDENCE
Address:	PRIVATE RESIDENCE
City,State,Zip:	PENRYN, CA 95663
Site ID:	214193
CERS ID:	T0606100224
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	West Bourgault - PLACER COUNTY
Entity Title:	Not reported
Affiliation Address:	3091 County Center Drive, Suite 180

YAMASHIRO, TADAO (Continued) **S101331755**

Affiliation City:	AUBURN
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	PAUL SANDERS - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title:	Not reported
Affiliation Address:	11020 SUN CENTER DRIVE #200
Affiliation City:	RANCHO CORDOVA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

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7 **YAMASHIRO PROPERTY** **ENVIROSTOR** **S118353726**
South **TAYLOR ROAD** **VCP** **N/A**
1/2-1 **PENRYN, CA 95663**
0.600 mi.
3167 ft.

Relative: **Lower**

Actual: **682 ft.**

ENVIROSTOR:

Name:	YAMASHIRO PROPERTY
Address:	TAYLOR ROAD
City,State,Zip:	PENRYN, CA 95663
Facility ID:	60002241
Status:	Inactive - Needs Evaluation
Status Date:	10/04/2018
Site Code:	102272
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	22
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	William Martinez
Supervisor:	Steven Becker
Division Branch:	Cleanup San Joaquin
Assembly:	05
Senate:	01
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.85809
Longitude:	-121.1572
APN:	032133045000, 032134006000, 032134007510
Past Use:	AGRICULTURAL - ORCHARD
Potential COC:	Under Investigation Arsenic DDD DDE DDT Lead
Confirmed COC:	Arsenic 30006-NO DDE DDT Lead Under Investigation
Potential Description:	SOIL
Alias Name:	032133045000
Alias Type:	APN
Alias Name:	032134006000
Alias Type:	APN
Alias Name:	032134007510

YAMASHIRO PROPERTY (Continued) **S118353726**

Alias Type: APN
Alias Name: 102272
Alias Type: Project Code (Site Code)
Alias Name: 60002241
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 01/11/2016
Comments: Final DTSC Response and Comment letter submitted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 07/27/2016
Comments: Summary of teleconference regarding the path forward for background sampling and revised site Supplemental Investigation Work plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 12/04/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/18/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/02/2016
Comments: Final Annual Cost Estimate Letter For Fiscal Year 2016 - 2017

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 10/19/2015
Comments: FULLY EXECUTED VOLUNTARY CLEANUP AGREEMENT

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 03/18/2016
Comments: Fully Executed Amendment to Voluntary Cleanup Agreement

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported

YAMASHIRO PROPERTY (Continued) **S118353726**

Schedule Revised Date: Not reported

VCP:

Name:	YAMASHIRO PROPERTY
Address:	TAYLOR ROAD
City,State,Zip:	PENRYN, CA 95663
Facility ID:	60002241
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	22
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	William Martinez
Supervisor:	Steven Becker
Division Branch:	Cleanup San Joaquin
Site Code:	102272
Assembly:	05
Senate:	01
Special Programs Code:	Voluntary Cleanup Program
Status:	Inactive - Needs Evaluation
Status Date:	10/04/2018
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	38.85809 / -121.1572
APN:	032133045000, 032134006000, 032134007510
Past Use:	AGRICULTURAL - ORCHARD
Potential COC:	31001, 30001, 30006, 30007, 30008, 30013
Confirmed COC:	30001,30006-NO,30007,30008,30013,31001
Potential Description:	SOIL
Alias Name:	032133045000
Alias Type:	APN
Alias Name:	032134006000
Alias Type:	APN
Alias Name:	032134007510
Alias Type:	APN
Alias Name:	102272
Alias Type:	Project Code (Site Code)
Alias Name:	60002241
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	01/11/2016
Comments:	Final DTSC Response and Comment letter submitted
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	07/27/2016
Comments:	Summary of teleconference regarding the path forward for background sampling and revised site Supplemental Investigation Work plan.

YAMASHIRO PROPERTY (Continued) **S118353726**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement Termination Notification
Completed Date:	12/04/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	05/18/2016
Comments:	Completed
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/02/2016
Comments:	Final Annual Cost Estimate Letter For Fiscal Year 2016 - 2017
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	10/19/2015
Comments:	FULLY EXECUTED VOLUNTARY CLEANUP AGREEMENT
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Amendment - Order/Agreement
Completed Date:	03/18/2016
Comments:	Fully Executed Amendment to Voluntary Cleanup Agreement
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

8
East
1/2-1
0.852 mi.
4499 ft.

SECRET RAVINE SCHOOL
KENTUCKY GREEN WAY
NEWCASTLE, CA 95658

ENVIROSTOR
SCH
CERS

S118756672
N/A

Relative:
Higher

Actual:
822 ft.

ENVIROSTOR:

Name:	SECRET RAVINE SCHOOL
Address:	KENTUCKY GREEN WAY
City,State,Zip:	NEWCASTLE, CA 95658
Facility ID:	31010012
Status:	No Action Required
Status Date:	10/10/2003
Site Code:	104327
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	18
NPL:	NO

SECRET RAVINE SCHOOL (Continued) **S118756672**

Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Northern California Schools & Santa Susana
Assembly: 05
Senate: 01
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 38.8712
Longitude: -121.1386
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: NONE SPECIFIED No Contaminants found
Confirmed COC: NONE SPECIFIED
Potential Description: NMA
Alias Name: PLACER COE-SECRET RAVINE SCHOOL
Alias Type: Alternate Name
Alias Name: PLACER COUNTY OFFICE OF EDUCATION
Alias Type: Alternate Name
Alias Name: SECRET RAVINE SCHOOL
Alias Type: Alternate Name
Alias Name: 104327
Alias Type: Project Code (Site Code)
Alias Name: 31010012
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 03/26/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Addendum
Completed Date: 06/25/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 04/07/2005
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SECRET RAVINE SCHOOL (Continued) **S118756672**

SCH:

Name:	SECRET RAVINE SCHOOL
Address:	KENTUCKY GREEN WAY
City,State,Zip:	NEWCASTLE, CA 95658
Facility ID:	31010012
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	18
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104327
Assembly:	05
Senate:	01
Special Program Status:	Not reported
Status:	No Action Required
Status Date:	10/10/2003
Restricted Use:	NO
Funding:	School District
Latitude:	38.8712
Longitude:	-121.1386
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	NONE SPECIFIED, No Contaminants found
Confirmed COC:	NONE SPECIFIED
Potential Description:	NMA
Alias Name:	PLACER COE-SECRET RAVINE SCHOOL
Alias Type:	Alternate Name
Alias Name:	PLACER COUNTY OFFICE OF EDUCATION
Alias Type:	Alternate Name
Alias Name:	SECRET RAVINE SCHOOL
Alias Type:	Alternate Name
Alias Name:	104327
Alias Type:	Project Code (Site Code)
Alias Name:	31010012
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	03/26/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Addendum
Completed Date:	06/25/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE

SECRET RAVINE SCHOOL (Continued) **S118756672**

Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 04/07/2005
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:
Name: SECRET RAVINE SCHOOL
Address: KENTUCKY GREEN WAY
City,State,Zip: NEWCASTLE, CA 95658
Site ID: 371660
CERS ID: 31010012
CERS Description: School Investigation

Affiliation:
Affiliation Type Desc: Supervisor
Entity Name: JAVIER HINOJOSA
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: N/A
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/05/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/04/2019
Date Data Arrived at EDR: 11/13/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 76

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 11/22/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 11/22/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 14

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/07/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/28/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/07/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/28/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/11/2019
Date Data Arrived at EDR: 11/12/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/11/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 66

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 12/16/2019
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019
Date Data Arrived at EDR: 08/28/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 75
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/21/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/06/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/25/2020
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 73

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/11/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/17/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/07/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/28/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/18/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 62

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/04/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/16/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 69

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/27/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/07/2020
Number of Days to Update: 70
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/28/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 09/24/2019
Number of Days to Update: 70
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/21/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/02/2020
Number of Days to Update: 72

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/22/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/19/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 60

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/11/2019
Number of Days to Update: 70

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/21/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 73

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/22/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/05/2019
Date Data Arrived at EDR: 12/06/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/06/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 06/24/2019
Date Made Active in Reports: 08/21/2019
Number of Days to Update: 58

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/22/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 66

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/16/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/12/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/10/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/09/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/16/2019
Date Data Arrived at EDR: 12/19/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/03/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 11/16/2018
Date Made Active in Reports: 11/21/2019
Number of Days to Update: 370

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/05/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 10/23/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/21/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/06/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 8

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/10/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/21/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/04/2019
Next Scheduled EDR Contact: 03/16/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 78

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/28/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2019
Date Data Arrived at EDR: 10/09/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 72

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/04/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019
Date Data Arrived at EDR: 11/25/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/25/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 56
Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/02/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49
Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97
Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/11/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 78
Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 03/02/2020
Number of Days to Update: 89
Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/13/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 10/06/2019
Date Data Arrived at EDR: 10/08/2019
Date Made Active in Reports: 01/02/2020
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 70
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/18/2019
Date Data Arrived at EDR: 12/20/2019
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 62
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 10/31/2019
Date Data Arrived at EDR: 11/01/2019
Date Made Active in Reports: 12/11/2019
Number of Days to Update: 40
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/06/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/12/2019
Number of Days to Update: 62

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 63

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 09/27/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 11/07/2019
Number of Days to Update: 37

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/24/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 59

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 03/29/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/22/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 66

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/22/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/17/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/02/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/08/2019
Date Data Arrived at EDR: 11/12/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 57

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 07/22/2019
Number of Days to Update: 54

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 65

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/19/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/06/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 58

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/24/2020
Number of Days to Update: 76
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/22/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/11/2019
Date Data Arrived at EDR: 11/12/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/11/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/11/2019
Date Data Arrived at EDR: 12/12/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/11/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/06/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/17/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/21/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 73

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/22/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/18/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/28/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
The Hazardous Waste Tracking System (HWTS) is the Department of Toxic Substances Control?s data repository for hazardous waste Identification (ID) numbers and manifest information. HWTS generates reports on hazardous waste shipments for generators, transporters, and TSDFs.

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 11/14/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 10/03/2019
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 34

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 09/06/2019
Date Data Arrived at EDR: 09/10/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 51

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 63

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/03/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/27/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 12/11/2019
Number of Days to Update: 43

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/03/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/08/2019
Date Data Arrived at EDR: 10/10/2019
Date Made Active in Reports: 12/11/2019
Number of Days to Update: 62

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/03/2020
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/13/2019
Date Data Arrived at EDR: 11/14/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 70

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/18/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/17/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/02/2020
Number of Days to Update: 72

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 11/05/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 64

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/25/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 61

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 08/16/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/18/2019
Number of Days to Update: 59

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/08/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/22/2019
Date Data Arrived at EDR: 07/23/2019
Date Made Active in Reports: 09/26/2019
Number of Days to Update: 65

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 12/11/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/15/2020
Date Data Arrived at EDR: 01/16/2020
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 22

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 10/16/2019
Date Made Active in Reports: 12/12/2019
Number of Days to Update: 57

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/14/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/13/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/20/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 71
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/14/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/13/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 01/27/2020
Number of Days to Update: 68
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29
Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 44

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 11/20/2019
Date Data Arrived at EDR: 12/02/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 67

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 11/06/2019
Date Data Arrived at EDR: 11/07/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 62

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/30/2019
Date Data Arrived at EDR: 10/30/2019
Date Made Active in Reports: 12/11/2019
Number of Days to Update: 42

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/24/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/02/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 64

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/03/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/02/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 64

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/03/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 11/05/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 64

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/04/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 66

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/17/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 12/13/2019
Number of Days to Update: 52
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/17/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/03/2020
Number of Days to Update: 73
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/14/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 59
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/23/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/14/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 60
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/23/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/14/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 69
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2019
Date Data Arrived at EDR: 11/27/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 69

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/03/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 62

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/03/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/16/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 12/13/2019
Number of Days to Update: 52

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/08/2019
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/11/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 12/12/2019
Date Data Arrived at EDR: 12/13/2019
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 69

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/03/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 11/05/2019
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 02/20/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/05/2020
Next Scheduled EDR Contact: 06/22/2020
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2019
Date Data Arrived at EDR: 11/19/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 65

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/21/2020
Next Scheduled EDR Contact: 06/08/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 10/30/2019
Date Data Arrived at EDR: 11/01/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 68

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/13/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/14/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/09/2019
Date Data Arrived at EDR: 12/11/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 72

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 06/18/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 07/24/2019
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 01/07/2020
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/17/2019
Next Scheduled EDR Contact: 04/06/2020
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2019
Date Data Arrived at EDR: 11/07/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 62

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/13/2020
Next Scheduled EDR Contact: 04/27/2020
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2019
Date Data Arrived at EDR: 12/03/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 66

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/27/2020
Next Scheduled EDR Contact: 06/15/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/23/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/17/2019
Date Data Arrived at EDR: 10/22/2019
Date Made Active in Reports: 01/02/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 11/25/2019
Date Data Arrived at EDR: 11/27/2019
Date Made Active in Reports: 02/04/2020
Number of Days to Update: 69

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 02/03/2020
Next Scheduled EDR Contact: 05/18/2020
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/17/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 09/30/2019
Number of Days to Update: 63
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/21/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2019
Date Data Arrived at EDR: 10/23/2019
Date Made Active in Reports: 12/13/2019
Number of Days to Update: 51
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/21/2020
Next Scheduled EDR Contact: 05/04/2020
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2019
Date Data Arrived at EDR: 12/10/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 73
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/10/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/25/2019
Date Data Arrived at EDR: 10/01/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 30
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 12/19/2019
Next Scheduled EDR Contact: 04/13/2020
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 11/04/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 63

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 02/07/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/03/2020
Number of Days to Update: 60

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 01/30/2020
Next Scheduled EDR Contact: 05/25/2020
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/06/2020
Next Scheduled EDR Contact: 04/20/2020
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/31/2020
Next Scheduled EDR Contact: 05/11/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/14/2020
Next Scheduled EDR Contact: 04/07/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/18/2020
Next Scheduled EDR Contact: 06/01/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/18/2019
Next Scheduled EDR Contact: 03/23/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX D: QUALIFICATIONS

PARTNER

Bailey Balshor
Staff Scientist

Education

B.S. (Departmental Honors), Earth System Science, Emphasis in Hydrology and Terrestrial Ecosystems, University of California, Irvine, CA.

Highlights

Phase I Environmental Site Assessments
Transaction Screen Assessments
Environmental Desktop Reports
Records Search and Risk Assessment Report

Experience Summary

Ms. Balshor currently serves as a Staff Scientist for Partner Engineering and Science, Inc. (Partner) and is located out of the Roseville, California office. Her responsibilities include conducting site inspections, interviewing property and government agency personnel, and technical report writing. Ms. Balshor has over a year of experience conducting assessments for commercial, multi-family, and industrial facilities.

Ms. Balshor has a background in Earth System Sciences, with course work that focused on groundwater, environmental science, and geology. She also has further coursework in Urban and Regional planning, including courses in environmental law, city planning, and environment/human interaction. Ms. Balshor has more than three years of experience in conducting scientific data collection and report writing. In her role as a Staff Scientist, she uses her knowledge and skills to create accurate and detailed reports.

Project Experience

Retail and Gas Station Property, Reno, NV. Ms. Balshor performed a Phase I environmental site assessment for a shopping center equipped with a gasoline service station with a former release.

San Jose Industrial, San Jose, CA. Ms. Balshor performed a Phase I environmental site assessment for a multi-tenant industrial complex with a long history of machining and metal works conducted on-site.

San Francisco Residential, San Francisco, CA. Ms. Balshor performed a Phase I environmental site assessment for a multi-family property with former heating oil tanks and a known release.

Madison Avenue, Fair Oaks, CA. Ms. Balshor performed a Phase I environmental site assessment for a commercial building previously developed as a gasoline service station with two prior releases.

Contact

bbalshor@partneresi.com

Corinne Kennah-Cohn
Project Manager

Education

BS, Environmental Science (focus in Ecological Restoration), Humboldt State University, California

Highlights

6 years of experience in the environmental consulting industry
5 years of experience performing due diligence assessments
Completed over 1,000 due diligence assessments

Experience Summary

Ms. Kennah-Cohn currently holds the role of Project Manager at Partner Engineering and Science Inc. (Partner), where her responsibilities include the preparation and technical review of assessments in line with the American Society of Testing and Materials (ASTM) standards and US Environmental Protection Agency's All Appropriate Inquiry (AAI), as well as customized client formats, equity-level projects, Fannie Mae, and Freddie Mac.

Ms. Kennah-Cohn has over five years of experience in the environmental consulting industry, as has assisted in the completion of over 1,000 due diligence assessments including Phase I Environmental Site Assessments, Transaction Screen Assessments, Historical Risk Assessments, Records Search Risk Assessments, Database Reviews, Regulatory Agency File Reviews, and Client-Specific Property Inspection and Assessment Scopes for various property types. She has experience working for a diverse group of commercial real estate clients, including national and regional lenders, investors, equity stakeholders, and property owners

Project Experience

Ms. Kennah-Cohn has experience performing due diligence assessments for a variety of property types, including dry cleaners, fueling stations, bulk oil storage facilities, oil and gas well sites, automotive dealerships and repair shops, manufacturing, agricultural sites, lumber yards, hospitality, education institutions, multi-family, and medical office facilities. Project highlights include:

Fueling Station Portfolio, Greater Los Angeles Area, California. Ms. Kennah-Cohn performed site reconnaissance and regulatory file reviews for a nine-site portfolio of name-brand fueling stations with either current or historical subsurface contamination underground fuel tank releases.

Former Leather Tannery, Napa, California. Ms. Kennah-Cohn performed a Phase I Environmental Site Assessment (ESA) for a former leather tannery with historical petroleum hydrocarbon and hexavalent chromium impacts to soil and groundwater resulting from former tanning operations, including impacts to the Napa River and residential areas located adjacent to the site.

Industrial Parks, Greater Los Angeles and Sacramento Areas, California. Ms. Kennah-Cohn performed Phase I ESAs for a several multi-acre industrial sites occupied by various electroplating, chemical manufacturing, metal fabrication, cabinetry, and masonry tenants. Onsite features included wastewater treatment systems and multiple underground storage tanks containing various solvents, paint thinners and petroleum products.

Multi-Family Residential, Tampa, Florida. Ms. Kennah-Cohn performed a Phase I ESA for an apartment complex located adjacent to an abandoned waste oil collection site with documented soil and groundwater impacts, including a documented spill of waste oil which was contained in a stormwater retention basin on the subject property.

Private School Campus, Temecula, California. Ms. Kennah-Cohn performed a Phase I ESA for a 96-acre elementary, middle, and high school property featuring multiple septic tanks, onsite maintenance facilities, and underground petroleum and laboratory waste chemical storage tanks.

Former Landfill, Long Beach, California. Ms. Kennah-Cohn performed a Phase I ESA for a historical municipal and hazardous waste landfill undergoing redevelopment with a self-storage facility.

Historical Buildings, Sacramento, California. Ms. Kennah-Cohn has performed Phase I ESAs for multiple historical buildings in Downtown Sacramento prior to large-scale rehabilitation and redevelopment projects. Project highlights include impacts related to long-term dry cleaning uses. Additional assessments have included soil vapor, indoor air, asbestos, and lead paint screening.

Agricultural Sites, Greater Sacramento Area, California. Ms. Kennah-Cohn has performed Phase I ESAs for several orchard, winery, vineyard, dairy farm, and ranching properties including onsite domestic and irrigation wells, septic systems, wastewater treatment systems, vehicle and equipment maintenance areas, agricultural chemical storage, and burn piles containing vegetative waste as well as hazardous waste drums and various plastic and metal debris.

Retail Shopping Centers, Greater Los Angeles and Sacramento Areas, California. Ms. Kennah-Cohn has performed Phase I ESAs for several multi-acre shopping centers within the greater Los Angeles and Sacramento areas featuring current and historical soil, soil vapor, and/or groundwater impacts related to dry cleaning, automotive repair, and fueling station uses.

Contact

ckennahcohn@partneresi.com

PARTNER

SHALLOW SOIL SAMPLING REPORT

Project 8 (Penryn Winery)
7615 Callison Road
Penryn, California 95663

July 25, 2022
Partner Project Number: 20-277052.2

Prepared For:

PLACER COUNTY ENVIRONMENTAL HEALTH DIVISION
3091 County Center Drive, Suite 180
Auburn, California 95603

On Behalf Of:

Building Engineering & Maintenance, Inc. (BEM)
4120 Douglas Boulevard #306-175
Granite Bay, California 95746



Engineers who understand your business

PARTNER

July 25, 2022

Evan Mackenzie
Building Engineering & Maintenance, Inc. (BEM)
4120 Douglas Boulevard, Suite 306-175
Granite Bay, California 95746

Subject: Shallow Soil Investigation Report
Project 8 (Penryn Winery)
7615 Callison Road
Penryn, California 95663
Partner Project Number: 20-277052.2

Dear Mr. Mackenzie:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed at the above-referenced property. The following report describes the field activities, methods, and findings of the Shallow Soil Sampling conducted at the above-referenced property.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact John Wharff at (916) 237-0245.

Sincerely,

Partner Engineering and Science, Inc.

Lauren Hinch, GIT
Project Geologist

Cory Martini
Project Manager

John Wharff
Executive Director

Bruce Eppler, PG
Senior Project Manager

PROFESSIONAL GEOLOGIST
BRUCE H. EPPLER
No. 7779
Exp. 8/30/23
STATE OF CALIFORNIA

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2. Topographic Map
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1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate shallow soils in the former orchard areas on the Site for the presence of arsenic, lead and organochlorine pesticides (OCPs), as a consequence of the former on-Site orchard operations. Building Engineering & Maintenance (BEM) provided project authorization of Partner Proposal Number P22-277052.2.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. It cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by BEM (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted Partner's standard Terms and Conditions, a copy of which can be found at http://www.partneresi.com/terms-and-conditions.php.

2.0 SITE BACKGROUND

2.1 Site Description

The Site consists of five parcels of land comprising 71.56 acres located on the northeast corner of the intersection of Sisley Road and Callison Road within a residential area of Penryn, Placer County, California. According to information provided by the Client, the Site has been recently redeveloped with vineyards and additional proposed developments include a winery, including a tasting room and various support structures.

The Site is bound by single-family residences to the north, across railroad tracks; rural residences to the south, on either side of Callison Road and railroad tracks; rural residences to the east across railroad tracks; and rural residences to the west. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

2.2 Site History

Partner completed a *Phase I Environmental Site Assessment Report* (Phase I) for the Site, dated March 26, 2020, on behalf of Mima Capital, LLC. According to historical sources reviewed as part of the Phase I including topographic maps, aerial photographs, city directories, building records and interviews, the Site was undeveloped land as early as 1891, and developed with orchards throughout the central and southern portions of the property as early as 1938. Active orchard operations ceased prior to 1950 and by the early 1950s and through mid-1960s, the orchard appeared to be diminishing (i.e. left fallow). Orchards were no longer present by 1975. Residences were constructed on the Site in 1948, 1949, and 1973. The former on-Site orchard area was located on portions of Assessor's Parcel Numbers (APNs) 031-220-061, 032-124-044 and 032-124-080 and covered approximately 9.41 acres. The former on-Site orchard area still existing on these three parcels after 1950 covered approximately 4.92 acres. A breakdown of the orchard area for the three parcels is as follows:

Parcel	Orchard Area	Orchard Area After 1950
031-220-061	6.72 Acres	2.24 Acres
032-124-080	2.07 Acres	2.07 Acres
032-124-044	0.61 Acres	0.61 Acres
Total:	**9.41 Acres**	**4.92 Acres**

It should be noted that no Recognized Environmental Conditions (RECs) were identified in Partner's Phase I. However, the Placer County Environmental Health Department (PCEHD) requested a limited soil investigation be performed at the Site prior to the additional proposed redevelopment due to the historical on-Site agricultural activities (orchards).

Partner prepared a Shallow Soil Sampling Work Plan (Work Plan) for the Site dated June 9, 2022 outlining the proposed shallow soil sampling activities for PCEHD review and approval. The Work Plan. The PCEHD approved the Work Plan in an email dated June 10, 2022.

2.3 Geology

Review of the United States Geological Survey (USGS) *Rocklin, California* Quadrangle topographic map, indicates the Site is situated approximately 800 feet above mean sea level, and the local topography is sloping gently to the west. Refer to Figure 2 for a topographic map of the site vicinity.

The Site is located within the Northern Sierra Nevada Geomorphic Province, which is characterized by highly deformed north-south trending complex of metasedimentary rock and batholithic units. The metasedimentary and crystalline basement rocks are highly fractured and faulted and are overlain by Quaternary sediment derived from surrounding hills. The subsurface soil types in the general area are characterized by unconsolidated Quaternary age sediments. These sediments consist of clayey to sandy silts ranging from depths of 5 to 10 feet below ground surface (bgs), overlying more competent fractured bedrock. The bedrock contact can range between depths of approximately 5 to 20 feet bgs.

3.0 FIELD ACTIVITIES

The Shallow Soil Sampling scope of work included the collection of 21 shallow soil samples (including 16 site specific samples, three background samples, and two duplicate samples) from 19 sample locations (B1 through B18 and 1B14) throughout the former on-Site orchard areas. Sampling was performed in general accordance with the Department of Toxic Substances Control (DTSC) 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (DTSC Guidance). Refer to Table 1 for a summary of the sample locations, sampling schedule, and laboratory analyses for this investigation.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-Site personnel involved in the project prior to the commencement of sampling activities.

3.2 Sampling Equipment

On June 16, 2022, Partner collected the shallow soil samples (B1 through B18) and on July 6, 2022 Partner collected shallow soil sample 1B14 using a hand-held shovel. Sampling equipment was pre-cleaned prior to arriving on-Site and was decontaminated between each sample location with a three-stage decontamination procedure using deionized water and phosphate free soap to reduce the potential for cross-contamination.

3.3 Sample Locations

Based on *Table 1: Recommended Number of Soil Samples* from the DTSC Guidance, for sites of 10 acres (the Site is 9.41 acres), five discrete samples for arsenic are recommended. For sites of five acres with orchard areas after 1950 (the Site contained approximately 4.92 acres of orchard after 1950), Table 1 in the DTSC Guidance recommends 10 sample locations and 4 composite soil samples for OCP analysis. The shallow soil samples were collected according to the following schedule:

Area of Concern	Number of Soil Samples Collected	Sampling Depth	Constituent of Concern	Total Number of Soil Samples Analyzed	EPA Method of Analyses
Former 9.41 Acres of Orchard	Discrete: 6 Background: 3 Co-Located Field Duplicate: 1	0 to 6-inches bgs	Arsenic and Lead	10	6010

Former 4.92 Acres of Orchard Present After 1950	10 Discrete from 4 sub-areas composited into 4 samples. Composite Field Duplicate: 1	0 to 6 inches bgs	OCPs	5	8081

Refer to Figure 3 for a map indicating sample locations.

3.4 Soil Sampling

Prior to sampling, ground cover such as vegetation, roots or other extraneous material was scraped away to expose the first encountered soil at each sample location. Shallow soil samples from each sample location were collected with a shovel at a depth of 0 to 6 inches bgs and were transferred into a laboratory-provided unpreserved glass jar, which was sealed with a threaded, Teflon-lined lid. The jars were filled with soil to capacity to minimize headspace. The jars were labeled for identification and stored in an iced cooler.

Chain of custody procedures, including the use of chain of custody forms, were used to document sample handling and transport from collection to delivery to the laboratory for analysis.

Following the collection of the soil samples (B1 through B18 and 1B14) and delivery to the laboratory, four representative composite samples (Comp-1 through Comp- 4) were composited at the laboratory. Sample Comp-1 was a composite of samples B1 through B3, sample Comp-2 was a composite of samples B5, B5-DUP, B6, and B7, sample Comp-2 was a composite of samples B9 and B10, and sample Comp-4 was a composite of samples B12 and B13. Refer to Table 1 for an outline of the discrete and composite soil samples.

4.0 DATA ANALYSIS

4.1 Laboratory Analysis

Partner collected 21 shallow soil samples (including 16 discrete samples, three background samples, and two duplicate samples) on June 16, 2022 and July 6, 2022, which were transported in an iced cooler under chain-of-custody protocol to SunStar Laboratories, Inc. (SunStar), a state-certified laboratory (California Department of Public Health Environmental Laboratory Accreditation Program certificate number 2250) in Lake Forest, California, for analysis. 10 discrete soil samples (B4, B8, B11, B14, 1B14, B15, B15-DUP, B16, B17, and B18) were analyzed for lead and arsenic via EPA Method 6010B, and the four composite soil samples (Comp-1 through Comp-4) were analyzed for OCPs via EPA Method 8081A.

Laboratory analytical results are included in Appendix A and discussed below.

4.2 Regulatory Agency Comparison Criteria

Department of Toxic Substances Control Modified Screening Levels

Regional Screening Levels (RSLs) are generic, risk-based chemical concentrations developed by the EPA for use in initial screening-level evaluations. RSLs combine human health toxicity values with standard exposure factors to estimate contaminant concentrations that are considered to be health protective of human exposures over a lifetime through direct-contact exposure pathways (e.g., via inhalation and/or ingestion of and/or dermal contact with impacted soil and/or indoor air). RSLs are not legally enforceable standards, but rather are considered guidelines to evaluate if potential risks associated with encountered chemical impacts may warrant further evaluation.

The DTSC Office of Human and Ecological Risk (HERO) developed California-Modified Screening Levels (SLs) based on the EPA RSLs for use in the human health risk assessment process at hazardous waste sites and permitted facilities.

4.3 Soil Sample Data Analysis

Four of the nine analyzed discrete soil samples contained detectable concentrations of arsenic above laboratory reporting limits (RLs). The detected concentration of arsenic in sample B14 exceeds the DTSC Guidance background concentration for arsenic of 12 milligrams per kilogram (mg/kg).

Eight of the nine analyzed discrete soil samples contained detectable concentrations of lead above the laboratory RL. The detected concentrations of lead do not exceed the DTSC commercial/industrial land use SL.

Two of the four composite soil samples (Comp-2 and Comp-3) contained detectable concentrations of the OCP 4,4-dichlorodiphenyldichloroethene (4,4-DDE), above the laboratory RL. The detected concentrations of 4,4-DDE do not exceed the DTSC commercial/industrial land use SL.

Refer to Tables 2 and 3 for a summary of the soil sample arsenic and lead, and OCPs laboratory analysis results, respectively.

4.4 Discussion

Lead or OCPs were not detected in the soil samples at concentrations above applicable screening criteria concentrations in the shallow soil samples collected at the Site. Therefore, there does not appear to be significant lead or OCP shallow soil impacts from the former orchard operations at the Site.

Arsenic was detected in sample B14 at a concentration above the DTSC Guidance background concentration of 12 mg/kg. Sample B14 was located in a cut area where approximately 20 feet of soil had been removed from the grade of the former orchard as part of Site development activities. The detected concentration of arsenic in sample B14 is likely representative of natural occurring arsenic concentrations present at deeper depths beneath the Site and not indicative of shallow soil impacts from former orchard operations. Based on client provided information, the cut area where sample B14 was collected will be capped with a concrete foundation as part of redevelopment activities, which will make exposure pathways to the arsenic detected in sample B14 incomplete.

Sample 1B14 was collected to the northeast of B14 and the cut area to obtain a representative sample of shallow soils present during the former orchard operations in this area of the Site. Sample 1B14 did not contain arsenic at a concentration above the laboratory RL. Therefore, based on the soil sample analytical results, there does not appear to be significant arsenic shallow soil impacts from the former orchard operations at the Site.

5.0 SUMMARY AND CONCLUSIONS

Partner conducted Shallow Soil Sampling at the Site to evaluate shallow soils in the former orchard areas on the Site for the presence of arsenic, lead and OCPs, as a consequence of the former on-Site orchard operations. The Shallow Soil Sampling scope of work included the collection of 21 shallow soil samples (including 16 discrete samples, three background samples, and two duplicate samples) from 19 sample locations (B1 through B18 and 1B14) throughout the former on-Site orchard areas. Sampling was performed in general accordance with the DTSC Guidance. 10 discrete soil samples (B4, B8, B11, B14, 1B14, B15, B15-DUP, B16, B17, and B18) were analyzed for lead and arsenic via EPA Method 6010B and the four composite soil samples (Comp-1 through Comp-4) were analyzed for OCPs via EPA Method 8081A.

Arsenic was detected in four of the nine discrete soil samples at concentrations above the laboratory RLs. The detected concentration of arsenic in sample B14 exceeds the DTSC Guidance background concentration for arsenic of 12 mg/kg. Sample B14 was located in a cut area where approximately 20 feet of soil had been removed from the grade of the former orchard; therefore, the detected concentration of arsenic in B14 is likely representative of natural occurring arsenic concentrations present at deeper depths beneath the Site and not indicative of shallow soil impacts from former orchard operations. The cut area where sample B14 was collected will be capped with a concrete foundation as part of redevelopment activities, which will make exposure pathways to the arsenic detected in sample B14 incomplete.

Sample 1B14 was collected to the northeast of B14 and the cut area to obtain a representative sample of shallow soils present during the former orchard operations in this area of the Site. Sample 1B14 did not contain arsenic at a concentration above the laboratory RL. Therefore, based on the soil sample analytical results, there does not appear to be significant arsenic shallow soil impacts from the former orchard operations at the Site.

Lead was detected in eight of the nine discrete soil samples analyzed at concentrations below the applicable DTSC commercial/industrial SLs.

4,4-DDE was detected in two of the four composite soil samples (Comp-2 and Comp-3) at concentrations below the applicable DTSC commercial/industrial SLs.

Based on the absence of detected concentrations of lead or OCPs above applicable screening criteria in the shallow soil samples collected at the Site, there does not appear to be significant lead or OCPs shallow soil impacts from the former orchard operations at the Site.

Partner recommends no further investigation with respect to arsenic, lead and OCPs in shallow soils from the former on-Site orchard operations at this time.

TABLES

PARTNER

Table 1: Summary of Investigation Scope
7615 Callison Road
Penryn, California 95663
Partner Project Number 20-277052.2
Sampling Dates: June 16, 2022 and July 6, 2022

Boring Identification	Sampling Date	Location	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	0-0.5	See Composite
B2	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	0-0.5	See Composite
B3	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	0-0.5	See Composite
B4	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B5-DUP*	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	0-0.5	See Composite
B5	**6/16/2022**	Southern Portion of Former Orchard Area	Soil	0-0.5	See Composite
B6	**6/16/2022**	Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B7	**6/16/2022**	Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B8	**6/16/2022**	Central Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B9	**6/16/2022**	North-Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B10	**6/16/2022**	North-Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B11	**6/16/2022**	North-Central Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B12	**6/16/2022**	North-Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B13	**6/16/2022**	North-Central Portion of Former Orchard Area	Soil	0-0.5	See Composite
B14	**6/16/2022**	Northern Portion of Former Orchard Area Within Development Cut Area Approximately 20 Feet Below Prior Orchard Operations Grade	Soil	**0-0.5**	Lead, Arsenic
1B14	**7/6/2022**	Northern Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B15	**6/16/2022**	Northern Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B15-DUP	**6/16/2022**	Northern Portion of Former Orchard Area	Soil	**0-0.5**	Lead, Arsenic
B16	**6/16/2022**	Northern Portion of Site Outside of Former Orchard Area (Background Sample)	Soil	**0-0.5**	Lead, Arsenic
B17	**6/16/2022**	West Side of Site Outside of Former Orchard Area (Background Sample)	Soil	**0-0.5**	Lead, Arsenic
B18	**6/16/2022**	Southwest Portion of Site Outside Former Orchard Area (Background Sample)	Soil	**0-0.5**	Lead, Arsenic
Comp-1 3:1 (B1-B3)	**6/16/2022**	Composite of Samples B1, B2, and B3	Soil	<u>0-0.5</u>	OCPs
Comp-2 4:1 (B5, B5-DUP, B6, and B7)	**6/16/2022**	Composite of Samples B5, B5-DUP, B6, and B7	Soil	<u>0-0.5</u>	
Comp-3 2:1 (B9-B10)	**6/16/2022**	Composite of Sample B9 and B10	Soil	<u>0-0.5</u>	
Comp-4 2:1 (B12-B13)	**6/16/2022**	Composite of Samples B12 and B13	Soil	<u>0-0.5</u>	

Notes:

*Depths in **bold** analyzed for lead and arsenic via United States Environmental Protection Agency (EPA) Method 6010B. <u>Underlined</u> depths analyzed for organochlorine pesticides (OCPs) via EPA Method 8081A.

DUP = duplicate

bgs = below ground surface

Table 2: Soil Sample Arsenic and Lead Laboratory Results
7615 Callison Road
Penryn, California 95663
Partner Project Number 20-277052.2
Sampling Dates: June 16, 2022 and July 6, 2022

EPA Method	6010B		
Units	(mg/kg)		
Sample ID	**Sampling Date**	**Arsenic**	**Total Lead**
B4	**6/16/2022**	**11.7**	**57.4**
B8	**6/16/2022**	<5.00	**8.16**
B11	**6/16/2022**	<5.00	**3.45**
B14	**6/16/2022**	**32.5**	<3.00
1B14	**7/6/2022**	<5.00	**3.71**
B15	**6/16/2022**	<5.00	**5.56**
B15-DUP	**6/16/2022**	<5.00	**5.36**
B16	**6/16/2022**	**5.08**	**5.03**
B17	**6/16/2022**	**6.55**	**13.7**
B18	**6/16/2022**	<5.00	**6.30**
Background Concentrations		**12****	**10.1 - 37.7***
Commercial/Industrial SL		**0.36**	**320**

Notes:

mg/kg = milligrams per kilogram

*From Kearney Foundation of Soil Science March 1996 report Background Concentrations of Trace and Major Elements in California Soils. Background concentrations of metals are considered to be within one standard deviation from the mean metal concentrations determined by the study.

**From Department of Toxic Substance Control (DTSC) 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision).

< = not detected above indicated laboratory Reporting Limit (RL).

SL = June 2020 Department of Toxic Substances Control (DTSC) Modified Screening Level (SL) for commercial/industrial soil.

Values in **bold** exceed laboratory RLs.

Highlighted values exceed background concentration.

Table 3: Soil Sample OCPs Laboratory Results
7615 Callison Road
Penryn, California 95663
Partner Project Number 20-277052.2
Sampling Date: June 16, 2022

EPA Method	OCPs via 8081A				
Units	(mg/kg)				
Analyte	Commercial/ Industrial SL	Comp-1 3:1 (B1, B2, and B3)	Comp-2 4:1 (B5, B5-DUP, B6, and B7)	Comp-3 2:1 (B9 and B10)	Comp-4 2:1 (B12 and B13)
4,4-DDE	**9.3**	**0.028**	**0.0070**	<0.0050	<0.0050
Other OCPs	**Varies**	ND	ND	ND	ND

Notes:

EPA = United States Environmental Protection Agency

OCP = organochlorine pesticides

mg/kg = milligrams per kilogram

SL = June 2020 Department of Toxic Substances Control (DTSC) Modified Screening Level (SL) for commercial/industrial soil.

< = not detected above indicated laboratory Reporting Limit (RL)

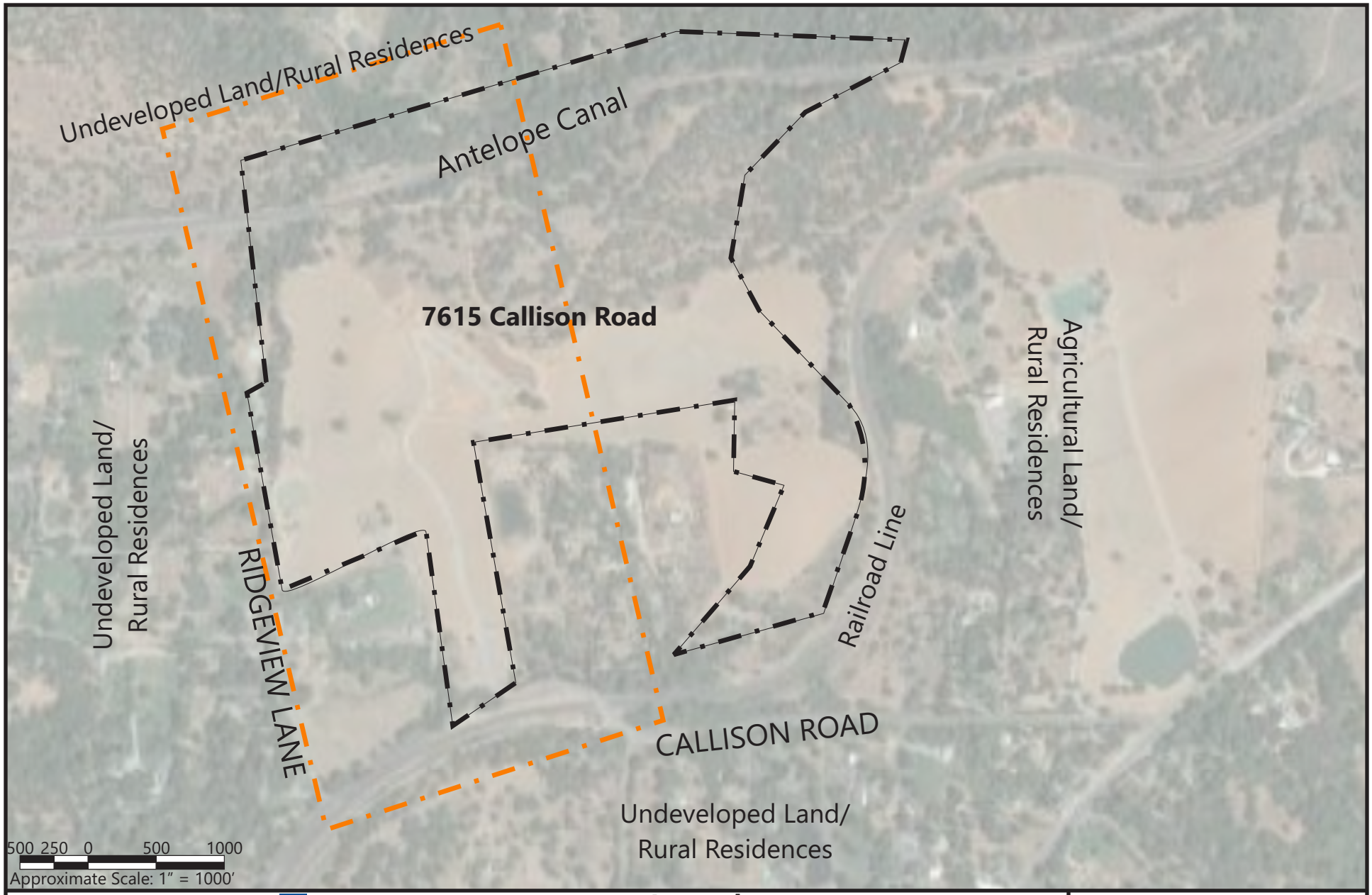
4,4-DDE = 4,4-Dichlorodiphenyldichloroethene

ND = not detected above laboratory RLs

Values in **bold** exceed laboratory RLs

FIGURES

PARTNER



Legend

Subject Property

Area Shown in Figure 3

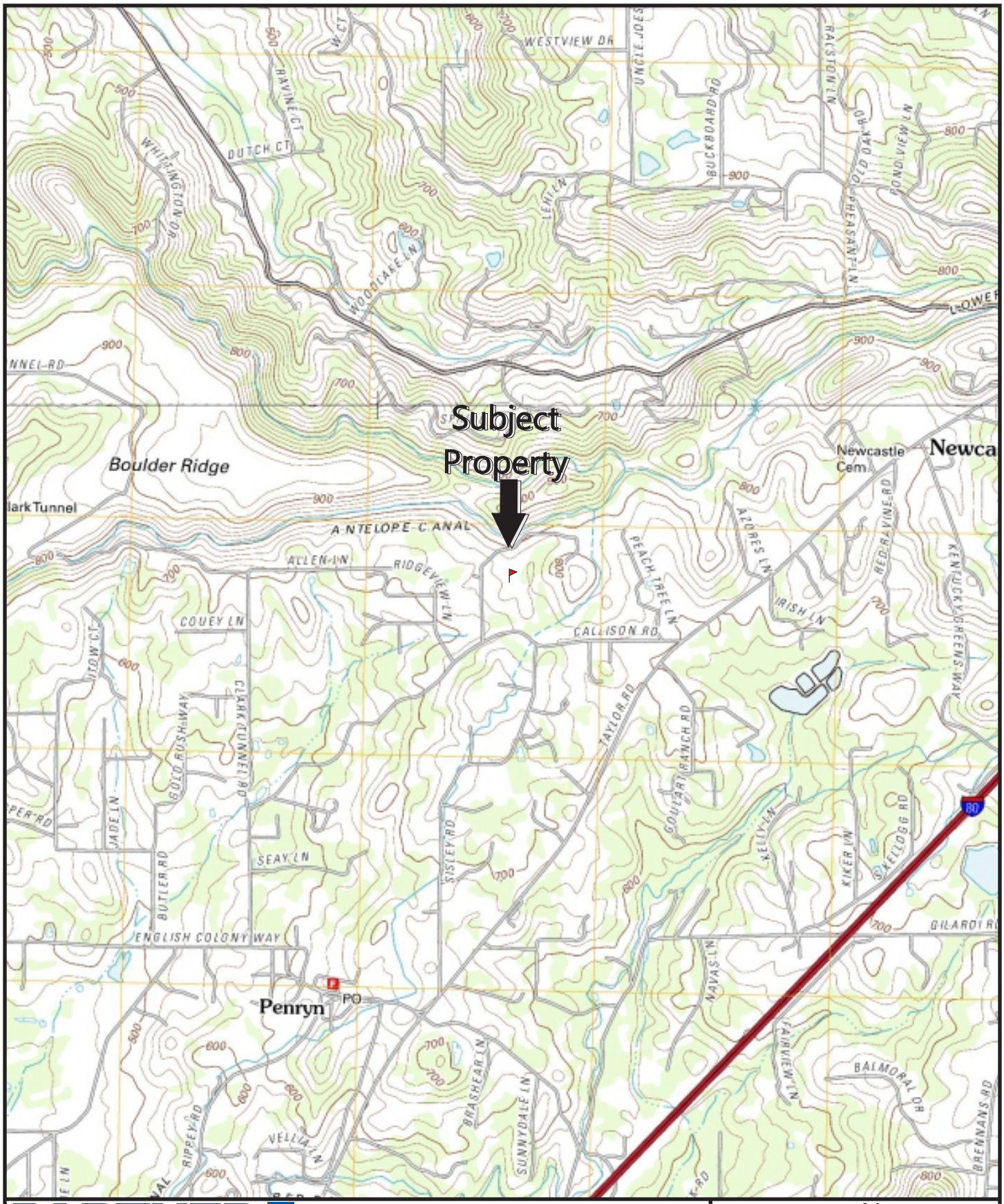
PARTNER
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 20-277052.2

Site Vicinity Map

Figure	Prepared By	Date
1	L. Hinch	June 2022

7615 Callison Road
Penryn, California 95663



PARTNER

2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 20-277052.2

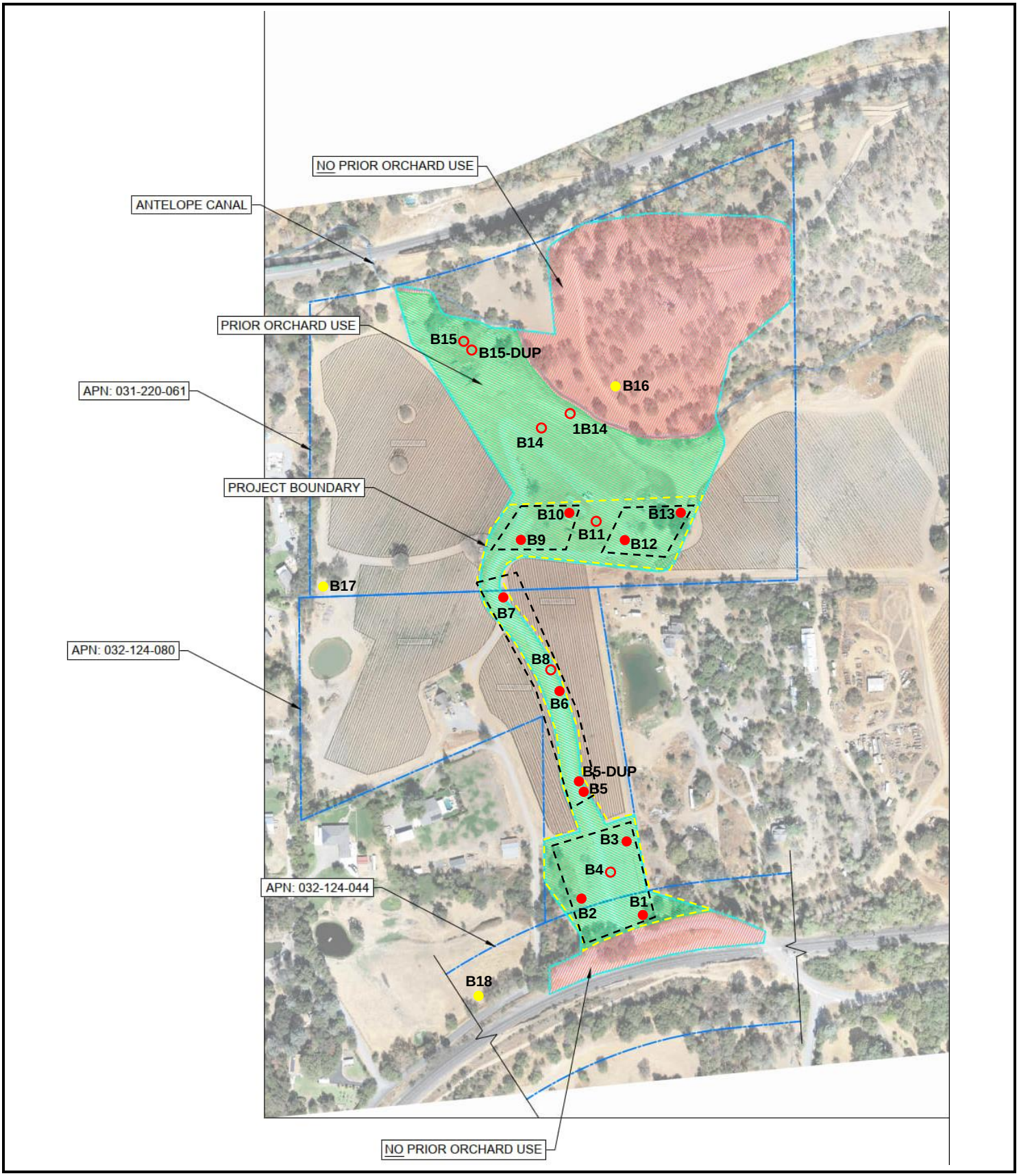
N

USGS *Rocklin, California* Quadrangle
Version: 2012

Topographic Map

Figure	Prepared By	Date
2	L. Hinch	June 2022

7615 Callison Road
Penryn, California 95663



N

Drawing Not To Scale

KEY:

- Composited Discrete Sample Location
- Discrete Sample Location for Arsenic and Lead Analysis
- Background Sample Location
- Former Orchard Use After 1950
- Group of Discrete Samples
- Composited for OCP Analysis

SAMPLE LOCATION MAP

7615 CALLISON ROAD, PENRYN, CA 95663

Project No. 20-277052.2

PARTNER

APPENDIX A: LABORATORY ANALYTICAL REPORTS

PARTNER

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
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949.297.5027 Fax

29 June 2022

Cory Martini
Partner Engineering & Science, Inc.--Oakland
1017 22nd Ave. Suite 107
Oakland, CA 94606

RE: 7615 Callison Rd Penryn

Enclosed are the results of analyses for samples received by the laboratory on 06/17/22 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joann Marroquin
Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
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949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B4	T221728-04	Soil	06/16/22 09:11	06/17/22 12:00
B8	T221728-09	Soil	06/16/22 09:46	06/17/22 12:00
B11	T221728-12	Soil	06/16/22 10:23	06/17/22 12:00
B14	T221728-15	Soil	06/16/22 10:41	06/17/22 12:00
B15	T221728-16	Soil	06/16/22 10:46	06/17/22 12:00
B15-DUP	T221728-17	Soil	06/16/22 10:46	06/17/22 12:00
B16	T221728-18	Soil	06/16/22 10:52	06/17/22 12:00
B17	T221728-19	Soil	06/16/22 11:01	06/17/22 12:00
B18	T221728-20	Soil	06/16/22 11:08	06/17/22 12:00
Comp-1 3:1 (B1-B3)	T221728-21	Soil	06/16/22 00:00	06/17/22 12:00
Comp-2 4:1 (B5DUP-B7)	T221728-22	Soil	06/16/22 00:00	06/17/22 12:00
Comp-3 2:1 (B9-B10)	T221728-23	Soil	06/16/22 00:00	06/17/22 12:00
Comp-4 2:1 (B12-B13)	T221728-24	Soil	06/16/22 00:00	06/17/22 12:00

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin

Joann Marroquin, Director of Operations

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

DETECTIONS SUMMARY

Sample ID: B4 **Laboratory ID:** T221728-04

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**11.7**	5.00	mg/kg	EPA 6010b	
Lead	**57.4**	3.00	mg/kg	EPA 6010b	

Sample ID: B8 **Laboratory ID:** T221728-09

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**8.16**	3.00	mg/kg	EPA 6010b	

Sample ID: B11 **Laboratory ID:** T221728-12

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**3.45**	3.00	mg/kg	EPA 6010b	

Sample ID: B14 **Laboratory ID:** T221728-15

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**32.5**	5.00	mg/kg	EPA 6010b	

Sample ID: B15 **Laboratory ID:** T221728-16

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**5.56**	3.00	mg/kg	EPA 6010b	

Sample ID: B15-DUP **Laboratory ID:** T221728-17

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**5.36**	3.00	mg/kg	EPA 6010b	

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Joann Marroquin

Joann Marroquin, Director of Operations

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Sample ID: B16 **Laboratory ID:** T221728-18

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**5.08**	5.00	mg/kg	EPA 6010b	
Lead	**5.03**	3.00	mg/kg	EPA 6010b	

Sample ID: B17 **Laboratory ID:** T221728-19

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic	**6.55**	5.00	mg/kg	EPA 6010b	
Lead	**13.7**	3.00	mg/kg	EPA 6010b	

Sample ID: B18 **Laboratory ID:** T221728-20

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**6.30**	3.00	mg/kg	EPA 6010b	

Sample ID: Comp-1 3:1 (B1-B3) **Laboratory ID:** T221728-21

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4′-DDE	**0.028**	0.0050	mg/kg	EPA 8081A	

Sample ID: Comp-2 4:1 (B5DUP-B7) **Laboratory ID:** T221728-22

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4′-DDE	**0.0070**	0.0050	mg/kg	EPA 8081A	

Sample ID: Comp-3 2:1 (B9-B10) **Laboratory ID:** T221728-23

No Results Detected

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Sample ID: Comp-4 2:1 (B12-B13) **Laboratory ID:** T221728-24

No Results Detected

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B4

T221728-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	**11.7**	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**57.4**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B8

T221728-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	ND	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**8.16**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B11

T221728-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	ND	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**3.45**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B14

T221728-15 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	**32.5**	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	ND	3.00	"	"	"	"	"	"	

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Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B15

T221728-16 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6010B									
Arsenic	ND	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**5.56**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B15-DUP

T221728-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	ND	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**5.36**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B16

T221728-18 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6010B									
Arsenic	**5.08**	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**5.03**	3.00	"	"	"	"	"	"	

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1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B17

T221728-19 (Soil)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Metals by EPA 6010B									
Arsenic	**6.55**	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**13.7**	3.00	"	"	"	"	"	"	

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

B18

T221728-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SunStar Laboratories, Inc.									
Metals by EPA 6010B									
Arsenic	ND	5.00	mg/kg	1	22F0296	06/17/22	06/24/22	EPA 6010b	
Lead	**6.30**	3.00	"	"	"	"	"	"	

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Providing Quality Analytical Services Nationwide

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Comp-1 3:1 (B1-B3)

T221728-21 (Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.0050	mg/kg	1	22F0297	06/17/22	06/20/22	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4´-DDE	**0.028**	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*91.8 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*109 %*		*35-140*	"	"	"	"	

SunStar Laboratories, Inc.



Joann Marroquin, Director of Operations

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Comp-2 4:1 (B5DUP-B7)

T221728-22 (Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.0050	mg/kg	1	22F0297	06/17/22	06/20/22	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4´-DDE	**0.0070**	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*95.1 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*109 %*		*35-140*	"	"	"	"	

SunStar Laboratories, Inc.



Joann Marroquin, Director of Operations

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SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Comp-3 2:1 (B9-B10)

T221728-23 (Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.0050	mg/kg	1	22F0297	06/17/22	06/20/22	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*90.6 %*		*35-140*	"	"	"	"	
Surrogate: Decachlorobiphenyl		*109 %*		*35-140*	"	"	"	"	

SunStar Laboratories, Inc.

Joann Marroquin

Joann Marroquin, Director of Operations

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Providing Quality Analytical Services Nationwide

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949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Comp-4 2:1 (B12-B13)

T221728-24 (Soil)

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
alpha-BHC	ND	0.0050	mg/kg	1	22F0297	06/17/22	06/20/22	EPA 8081A	
gamma-BHC (Lindane)	ND	0.0050	"	"	"	"	"	"	
beta-BHC	ND	0.0050	"	"	"	"	"	"	
delta-BHC	ND	0.0050	"	"	"	"	"	"	
Heptachlor	ND	0.0050	"	"	"	"	"	"	
Aldrin	ND	0.0050	"	"	"	"	"	"	
Heptachlor epoxide	ND	0.0050	"	"	"	"	"	"	
gamma-Chlordane	ND	0.0050	"	"	"	"	"	"	
alpha-Chlordane	ND	0.0050	"	"	"	"	"	"	
Endosulfan I	ND	0.0050	"	"	"	"	"	"	
4,4´-DDE	ND	0.0050	"	"	"	"	"	"	
Dieldrin	ND	0.0050	"	"	"	"	"	"	
Endrin	ND	0.0050	"	"	"	"	"	"	
4,4´-DDD	ND	0.0050	"	"	"	"	"	"	
Endosulfan II	ND	0.0050	"	"	"	"	"	"	
4,4´-DDT	ND	0.0050	"	"	"	"	"	"	
Endrin aldehyde	ND	0.0050	"	"	"	"	"	"	
Endosulfan sulfate	ND	0.0050	"	"	"	"	"	"	
Methoxychlor	ND	0.0050	"	"	"	"	"	"	
Endrin ketone	ND	0.0050	"	"	"	"	"	"	
Toxaphene	ND	0.020	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*120 %*	*35-140*		"	"	"	"	
Surrogate: Decachlorobiphenyl		*135 %*	*35-140*		"	"	"	"	

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 22F0296 - EPA 3050B										
Blank (22F0296-BLK1)				Prepared: 06/17/22 Analyzed: 06/24/22						
Arsenic	ND	5.00	mg/kg							
Lead	ND	3.00	"							
LCS (22F0296-BS1)				Prepared: 06/17/22 Analyzed: 06/24/22						
Arsenic	93.6	5.00	mg/kg	100		93.6	75-125			
Lead	93.8	3.00	"	100		93.8	75-125			
Matrix Spike (22F0296-MS1)	**Source: T221728-04**			Prepared: 06/17/22 Analyzed: 06/24/22						
Arsenic	89.4	5.00	mg/kg	100	11.7	77.6	75-125			
Lead	130	3.00	"	100	57.4	73.0	75-125			QM-05
Matrix Spike Dup (22F0296-MSD1)	**Source: T221728-04**			Prepared: 06/17/22 Analyzed: 06/24/22						
Arsenic	96.8	5.00	mg/kg	100	11.7	85.1	75-125	8.01	20	
Lead	134	3.00	"	100	57.4	76.9	75-125	2.97	20	

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 22F0297 - EPA 3550C ECD/GCMS										
Blank (22F0297-BLK1)				Prepared: 06/17/22 Analyzed: 06/20/22						
alpha-BHC	ND	0.0050	mg/kg							
gamma-BHC (Lindane)	ND	0.0050	"							
beta-BHC	ND	0.0050	"							
delta-BHC	ND	0.0050	"							
Heptachlor	ND	0.0050	"							
Aldrin	ND	0.0050	"							
Heptachlor epoxide	ND	0.0050	"							
gamma-Chlordane	ND	0.0050	"							
alpha-Chlordane	ND	0.0050	"							
Endosulfan I	ND	0.0050	"							
4,4´-DDE	ND	0.0050	"							
Dieldrin	ND	0.0050	"							
Endrin	ND	0.0050	"							
4,4´-DDD	ND	0.0050	"							
Endosulfan II	ND	0.0050	"							
4,4´-DDT	ND	0.0050	"							
Endrin aldehyde	ND	0.0050	"							
Endosulfan sulfate	ND	0.0050	"							
Methoxychlor	ND	0.0050	"							
Endrin ketone	ND	0.0050	"							
Toxaphene	ND	0.020	"							
Surrogate: Tetrachloro-meta-xylene	*0.00846*		*"*	*0.0100*		*84.6*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.0107*		*"*	*0.0100*		*107*	*35-140*			
LCS (22F0297-BS1)				Prepared: 06/17/22 Analyzed: 06/20/22						
gamma-BHC (Lindane)	0.0312	0.0050	mg/kg	0.0404		77.1	40-120			
Heptachlor	0.0322	0.0050	"	0.0400		80.6	40-120			
Aldrin	0.0324	0.0050	"	0.0400		81.1	40-120			
Dieldrin	0.0326	0.0050	"	0.0402		81.0	40-120			
Endrin	0.0308	0.0050	"	0.0402		76.6	40-120			
4,4´-DDT	0.0238	0.0050	"	0.0404		58.9	33-147			
Surrogate: Tetrachloro-meta-xylene	*0.00914*		*"*	*0.0100*		*91.4*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.0108*		*"*	*0.0100*		*108*	*35-140*			

SunStar Laboratories, Inc.



Joann Marroquin, Director of Operations

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Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 22F0297 - EPA 3550C ECD/GCMS										
LCS Dup (22F0297-BSD1)				Prepared: 06/17/22 Analyzed: 06/20/22						
gamma-BHC (Lindane)	0.0316	0.0050	mg/kg	0.0404		78.3	40-120	1.44	30	
Heptachlor	0.0328	0.0050	"	0.0400		82.1	40-120	1.90	30	
Aldrin	0.0326	0.0050	"	0.0400		81.5	40-120	0.519	30	
Dieldrin	0.0337	0.0050	"	0.0402		83.7	40-120	3.28	30	
Endrin	0.0318	0.0050	"	0.0402		79.0	40-120	3.10	30	
4,4´-DDT	0.0243	0.0050	"	0.0404		60.1	33-147	2.10	30	
Surrogate: Tetrachloro-meta-xylene	*0.00910*		*"*	*0.0100*		*91.0*	*35-140*			
Surrogate: Decachlorobiphenyl	*0.0108*		*"*	*0.0100*		*108*	*35-140*			

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Joann Marroquin

Joann Marroquin, Director of Operations

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949.297.5027 Fax

Partner Engineering & Science, Inc.--Oakland	Project: 7615 Callison Rd Penryn	
1017 22nd Ave. Suite 107	Project Number: 20-277052.2	**Reported:**
Oakland CA, 94606	Project Manager: Cory Martini	06/29/22 14:20

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: PCEHD
Address: 7615 Callison Road, Penryn, CA 95663
Phone: 916-838-7365 Fax:
Project Manager: Cory Martini

Date: 6-16-22 Page: 1 Of 2
Project Name: Project 8 (Penryn Winery)
Collector: Megan Davey Client Project #: 20-277052.2
Batch #: T221728 EDF #:

Laboratory ID #	Sample ID	Date Sampled	(am) Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	6010B - arsenic + lead	8081 - OCPs		Comments/Preservative	Total # of containers
1	B1	6-16-22	8:45	soil	4oz jar												X		comp 1	1
2	B2		8:50														X			1
3	B3		9:02													X				1
4	B4		9:11													X				1
5	B5-dup		9:26														X			1
6	B5		9:26														X		comp 2	1
7	B6		9:39														X			1
8	B7		9:54														X			1
9	B8		9:46													X				1
10	B9		10:15														X		comp 3	1
11	B11		10:12														X			1
12	B11		10:23													X				1
13	B12		10:29														X		comp 4	1
14	B13		10:20														X			1
15	B14		10:41													X				1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
[signature]	6-16-22 2:25PM	Ed Stevens	6/16/22 1425
Ed Stevens	6/16/22; 1700	GLS	
GLS	6.17.22 1200	[signature]	6.17.22 1200

Total # of containers: 15
Chain of Custody seals: Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold: 4.2°c

Turn around time: Standard

Notes

Sample disposal Instructions: Disposal @ $2.00 each ___ Return to client ___ Pickup ___

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: PCEHD
Address: 7615 Callison Road, Penryn, CA 95663
Phone: 916-838-7365 Fax:
Project Manager: Cory Martini

Date: 6-16-22 Page: 2 Of 2
Project Name: Project 8 (Penryn Winery)
Collector: Megan Davey Client Project #: 20-277052.2
Batch #: T221728 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	6010B - arsenic + lead	8081 - OCPs			Comments/Preservative	Total # of containers
16	B15	6-16-22	10:40	Soil	4oz. Jar											X					1
17	B15-dup		10:40													X					1
18	B16		10:52													X					1
19	B17		11:01													X					1
20	B18		11:08													X					1

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	6-16-22 2:25 PM	Ed Stevens	6/16/22 1425
Ed Stevens	6/16/22; 1700	GLS	
GLS	6.17.22 1200		6.17.22 1200

Total # of containers: 5
Chain of Custody seals Y/N/NA:
Seals intact? Y/N/NA:
Received good condition/cold:

Turn around time: Standard

Notes

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T221728

Client Name: Partner Project: Project 8 (Penryn Winery)

Delivered by: ☐ Client ☐ SunStar Courier ☒ GLS ☐ FedEx ☐ UPS

If Courier, Received by: Date/Time Courier Received:

Lab Received by: Dave Date/Time Lab Received: 6.17.22 1200

Total number of coolers received: 1 Thermometer ID: SC-1 Calibration due: 8/24/22

Temperature: Cooler #1	4.1 °C +/- the CF (+0.1 °C)	= 4.2	°C corrected temperature
Temperature: Cooler #2	°C +/- the CF (+0.1 °C)	=	°C corrected temperature
Temperature: Cooler #3	°C +/- the CF (+0.1 °C)	=	°C corrected temperature
Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☒ **Yes** ☐ **No** ☐ **N/A**	
If NO:			
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**	
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**	

Custody seals intact on cooler/sample	☒ Yes	☐ No*	☐ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☒ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: QB 6.17.22

Comments:

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client: **Partner Engineering & Science, Inc.--Oakland** **Project Manager:** **Joann Marroquin**
Project: **7615 Callison Rd Penryn** **Project Number:** **20-277052.2**

Report To:
Partner Engineering & Science, Inc.--Oakland
Cory Martini
1017 22nd Ave. Suite 107
Oakland, CA 94606

Date Due: 06/24/22 17:00 (5 day TAT)
Received By: Paul Berner Date Received: 06/17/22 12:00
Logged In By: Elizabeth Sprowell Date Logged In: 06/17/22 11:55

Samples Received at: **4.2°C**
Custody Seals Yes Received On Ice Yes
Containers Intact Yes
COC/Labels Agree Yes
Preservation Confirı No

Analysis	Due	TAT	Expires	Comments
T221728-01 B1 [Soil] Sampled 06/16/22 08:45 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-02 B2 [Soil] Sampled 06/16/22 08:50 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-03 B3 [Soil] Sampled 06/16/22 09:02 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-04 B4 [Soil] Sampled 06/16/22 09:11 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 09:11	+ Arsenic
T221728-05 B5-DUP [Soil] Sampled 06/16/22 09:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-06 B5 [Soil] Sampled 06/16/22 09:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-07 B6 [Soil] Sampled 06/16/22 09:39 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-08 B7 [Soil] Sampled 06/16/22 09:54 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-09 B8 [Soil] Sampled 06/16/22 09:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 09:46	+ Arsenic

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client: Partner Engineering & Science, Inc.--Oakland
Project: 7615 Callison Rd Penryn
Project Manager: Joann Marroquin
Project Number: 20-277052.2

Analysis	Due	TAT	Expires	Comments
T221728-10 B9 [Soil] Sampled 06/16/22 10:15 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-11 B10 [Soil] Sampled 06/16/22 10:12 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-12 B11 [Soil] Sampled 06/16/22 10:23 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:23	+ Arsenic
T221728-13 B12 [Soil] Sampled 06/16/22 10:29 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-14 B13 [Soil] Sampled 06/16/22 10:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-15 B14 [Soil] Sampled 06/16/22 10:40 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:40	+ Arsenic
T221728-16 B15 [Soil] Sampled 06/16/22 10:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:46	+ Arsenic
T221728-17 B15-DUP [Soil] Sampled 06/16/22 10:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:46	+ Arsenic
T221728-18 B16 [Soil] Sampled 06/16/22 10:52 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:52	+ Arsenic
T221728-19 B17 [Soil] Sampled 06/16/22 11:01 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 11:01	+ Arsenic
T221728-20 B18 [Soil] Sampled 06/16/22 11:08 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 11:08	+ Arsenic
T221728-21 Comp-1 3:1 (B1-B3) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	
T221728-22 Comp-2 4:1 (B5DUP-B7) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**7615 Callison Rd Penryn**	**Project Number:**	**20-277052.2**

Analysis	Due	TAT	Expires	Comments
T221728-23 Comp-3 2:1 (B9-B10) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	
T221728-24 Comp-4 2:1 (B12-B13) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**7615 Callison Rd Penryn**	**Project Number:**	**20-277052.2**

Report To:

Partner Engineering & Science, Inc.--Oakland
Cory Martini
1017 22nd Ave. Suite 107
Oakland, CA 94606

Date Due:	06/24/22 17:00 (5 day TAT)		
Received By:	Dave Berner	Date Received:	06/17/22 12:00
Logged In By:	Elizabeth Sprowell	Date Logged In:	06/17/22 11:55

Samples Received at:	**4.2°C**		
Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Analysis	Due	TAT	Expires	Comments
T221728-01 B1 [Soil] Sampled 06/16/22 08:45 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-02 B2 [Soil] Sampled 06/16/22 08:50 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-03 B3 [Soil] Sampled 06/16/22 09:02 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-04 B4 [Soil] Sampled 06/16/22 09:11 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 09:11	+ Arsenic
T221728-05 B5-DUP [Soil] Sampled 06/16/22 09:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-06 B5 [Soil] Sampled 06/16/22 09:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-07 B6 [Soil] Sampled 06/16/22 09:39 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-08 B7 [Soil] Sampled 06/16/22 09:54 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-09 B8 [Soil] Sampled 06/16/22 09:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 09:46	+ Arsenic

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**7615 Callison Rd Penryn**	**Project Number:**	**20-277052.2**

Analysis	Due	TAT	Expires	Comments
T221728-10 B9 [Soil] Sampled 06/16/22 10:15 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-11 B10 [Soil] Sampled 06/16/22 10:12 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-12 B11 [Soil] Sampled 06/16/22 10:23 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:23	+ Arsenic
T221728-13 B12 [Soil] Sampled 06/16/22 10:29 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-14 B13 [Soil] Sampled 06/16/22 10:26 (GMT-08:00) Pacific Time (US &				
[NO ANALYSES]				
T221728-15 B14 [Soil] Sampled 06/16/22 10:41 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:41	+ Arsenic
T221728-16 B15 [Soil] Sampled 06/16/22 10:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:46	+ Arsenic
T221728-17 B15-DUP [Soil] Sampled 06/16/22 10:46 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:46	+ Arsenic
T221728-18 B16 [Soil] Sampled 06/16/22 10:52 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 10:52	+ Arsenic
T221728-19 B17 [Soil] Sampled 06/16/22 11:01 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 11:01	+ Arsenic
T221728-20 B18 [Soil] Sampled 06/16/22 11:08 (GMT-08:00) Pacific Time (US &				
6010 Pb	06/24/22 15:00	5	12/13/22 11:08	+ Arsenic
T221728-21 Comp-1 3:1 (B1-B3) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	
T221728-22 Comp-2 4:1 (B5DUP-B7) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221728

Client:	**Partner Engineering & Science, Inc.--Oakland**	**Project Manager:**	**Joann Marroquin**
Project:	**7615 Callison Rd Penryn**	**Project Number:**	**20-277052.2**

Analysis	Due	TAT	Expires	Comments
T221728-23 Comp-3 2:1 (B9-B10) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	
T221728-24 Comp-4 2:1 (B12-B13) [Soil] Sampled 06/16/22 00:00 (GMT-08:00) Pacific Time (US &				
8081 Pesticides	06/24/22 15:00	5	06/30/22 00:00	

Reviewed By

Date

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

14 July 2022

Cory Martini
Partner - Roseville
1544 Eureka Rd
Roseville, CA 95661

RE: Project winery

Enclosed are the results of analyses for samples received by the laboratory on 07/07/22 11:28. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joann Marroquin
Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner - Roseville	Project: Project winery	
1544 Eureka Rd	Project Number: 22-277052.2	**Reported:**
Roseville CA, 95661	Project Manager: Cory Martini	07/14/22 15:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1B 14	T221930-01	Soil	07/06/22 09:15	07/07/22 11:28

SunStar Laboratories, Inc.

Joann Marroquin

Joann Marroquin, Director of Operations

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner - Roseville	Project: Project winery	
1544 Eureka Rd	Project Number: 22-277052.2	**Reported:**
Roseville CA, 95661	Project Manager: Cory Martini	07/14/22 15:20

DETECTIONS SUMMARY

Sample ID: 1B 14 **Laboratory ID:** T221930-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead	**3.71**	3.00	mg/kg	EPA 6010b	

SunStar Laboratories, Inc.



Joann Marroquin, Director of Operations

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Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner - Roseville	Project: Project winery	
1544 Eureka Rd	Project Number: 22-277052.2	**Reported:**
Roseville CA, 95661	Project Manager: Cory Martini	07/14/22 15:20

1B 14

T221930-01 (Soil)

SunStar Laboratories, Inc.

Metals by EPA 6010B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	ND	5.00	mg/kg	1	22G0076	07/08/22	07/12/22	EPA 6010b	
Lead	**3.71**	3.00	"	"	"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin

Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner - Roseville	Project: Project winery	
1544 Eureka Rd	Project Number: 22-277052.2	**Reported:**
Roseville CA, 95661	Project Manager: Cory Martini	07/14/22 15:20

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 22G0076 - EPA 3050B										
Blank (22G0076-BLK1)				Prepared: 07/08/22 Analyzed: 07/12/22						
Arsenic	ND	5.00	mg/kg							
Lead	ND	3.00	"							
LCS (22G0076-BS1)				Prepared: 07/08/22 Analyzed: 07/12/22						
Arsenic	98.0	5.00	mg/kg	100		98.0	75-125			
Lead	96.3	3.00	"	100		96.3	75-125			
Matrix Spike (22G0076-MS1)	**Source: T221929-01**			Prepared: 07/08/22 Analyzed: 07/12/22						
Arsenic	61.0	5.00	mg/kg	100	1.90	59.1	75-125			QM-05
Lead	61.6	3.00	"	100	4.18	57.5	75-125			QM-05
Matrix Spike Dup (22G0076-MSD1)	**Source: T221929-01**			Prepared: 07/08/22 Analyzed: 07/12/22						
Arsenic	69.4	5.00	mg/kg	100	1.90	67.5	75-125	12.9	20	QM-05
Lead	67.2	3.00	"	100	4.18	63.0	75-125	8.62	20	QM-05

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joann Marroquin

Joann Marroquin, Director of Operations

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Partner - Roseville	Project: Project winery	
1544 Eureka Rd	Project Number: 22-277052.2	**Reported:**
Roseville CA, 95661	Project Manager: Cory Martini	07/14/22 15:20

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.



Joann Marroquin, Director of Operations

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Chain of Custody Record

Client: Partner Engineering & Science Inc.
Address: 1544 Eureka Rd #180 Roseville, Ca
Phone: 559-907-7502 Fax: —
Project Manager: ~~KDA~~ C. Martini

Date: 7-6-2022 Page: 1 Of 1
Project Name: Project 8 Winery
Collector: L. Hinch Client Project #: 22-277052.2
Batch #: — T221930 EDF #: —

Laboratory ID #	Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	6020 ICP-MS Metals	lead / Arsenic				Comments/Preservative	Total # of containers
	1314	7-6-22	9:15	Soil	Jar											X					

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
	7/6/22 1200	Ed Stevens	7/6/22 1200
Ed Stevens	7/06/22; 17:00	GLS	
GLS	7/7/22 11:28	[illegible]	7/7/22 11:28

Total # of containers: 1
Chain of Custody seals Y/N/NA: —
Seals intact? Y/N/NA: Y
Received good condition/cold: 4.2°

Notes

Turn around time: 5-day std.

Sample disposal Instructions: Disposal @ $2.00 each ____ Return to client ____ Pickup ____

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T221930

Client Name: PARTNER Project: PROJECT WINERY

Delivered by: ☐ Client ☐ SunStar Courier ☑ GLS ☐ FedEx ☐ UPS

If Courier, Received by: Date/Time Courier Received:

Lab Received by: MARVIN Date/Time Lab Received: 7/7/22 11:28

Total number of coolers received: 1 Thermometer ID: SC-1 Calibration due: 8/24/22

Temperature:	Cooler #1	4.1°C	°C +/- the CF (+0.1 °C) = 4.2°C	°C corrected temperature
Temperature:	Cooler #2		°C +/- the CF (+0.1 °C) =	°C corrected temperature
Temperature:	Cooler #3		°C +/- the CF (+0.1 °C) =	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers)	Within criteria?	☑ **Yes** ☐ **No** ☐ **N/A**
If NO:		
Samples received on ice?	☐ Yes	☐ **No → Complete Non-Conformance Sheet**
If on ice, samples received same day collected?	☐ Yes → Acceptable	☐ **No → Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample	☑ Yes	☐ No*	☐ N/A
Sample containers intact	☑ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☑ Yes	☐ No*	
Total number of containers received match COC	☑ Yes	☐ No*	
Proper containers received for analyses requested on COC	☑ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☑ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☑ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: MV 7/7/22

Comments:

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

WORK ORDER

T221930

Client:	**Partner - Roseville**	**Project Manager:**	**Joann Marroquin**
Project:	**Project winery**	**Project Number:**	**22-277052.2**

Report To:
Partner - Roseville
Cory Martini
1544 Eureka Rd
Roseville, CA 95661

Date Due:	07/14/22 17:00 (5 day TAT)		
Received By:	Marvin Ventura	Date Received:	07/07/22 11:28
Logged In By:	Elizabeth Sprowell	Date Logged In:	07/07/22 08:59

Samples Received at: **4.2°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirı	No		

Analysis	Due	TAT	Expires	Comments
T221930-01 1B 14 [Soil] Sampled 07/06/22 09:15 (GMT-08:00) Pacific Time (US &				
6010 Individual Metals	07/14/22 15:00	5	01/02/23 09:15	Pb, As

Reviewed By

Date

APPENDIX M

MacKay & Somps
ENGINEERS PLANNERS SURVEYORS

TECHNICAL MEMORANDUM

DATE: March 4, 2022

TO: Placer County

FROM: Cindy Gwaltney, P.E.

CC: Michael Fournier, BEM, Inc.; Tye Sheehan, P.E.

SUBJECT: Drainage Technical Memorandum for Project 8



Introduction & Overview

The proposed project, Project 8, would construct a winery consisting of a number of buildings, streets, and parking areas positioned on an undeveloped site in Penryn. The proposed project is located on the north side of Callison Road, east of Ridgeview Lane, and south and west of two Union Pacific railway lines. The site lies within the Antelope Creek watershed, which is within the larger Dry Creek watershed. The contributory area analyzed for the proposed project is comprised of the subject site, as identified by the Project Boundary in Figure 1 below, and adjacent contributory areas. The contributory area includes areas that discharge to and through the site, as well as downstream areas, to a logical discharge point for the purpose of comparing existing site discharge rates to proposed project discharge rates.

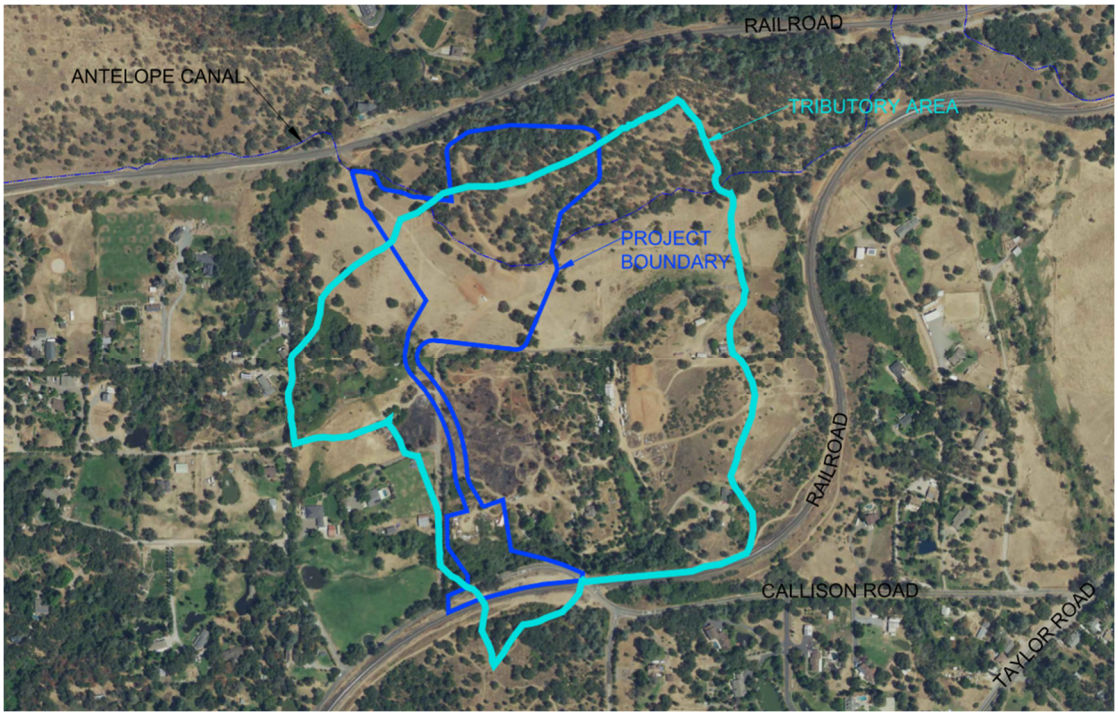


Figure 1. Project Boundary, Contributory Area, and Site Location

Purpose

This Technical Memorandum (TM) is a drainage assessment that supports the project entitlements for Project 8. This TM describes the site's existing conditions, proposed project conditions, and provides a hydrologic and hydraulic analysis of the site as well as the mitigation measures for flood control and storm water quality. Mitigation measures for volumetric impacts of the 100-year 8-day event are not required for this project.

Previous Studies

No previous studies were utilized in the preparation of this report.

Topography

The topography for the site is from aerial topography which was specifically flown for the Project 8 site. The horizontal datum for the survey is based on NAD83 California Zone II in US-FT. The factor used for the conversion from grid to ground is 1.000108532. The vertical datum for the topography is NGVD29.

ULOP

In 2007, the State of California enacted six bills to improve flood management, one of which pertains to the Sacramento and San Joaquin River Basins. Senate Bill 5 (SB5) is intended to bolster the relationship between local land use planning decisions and flood management practices. The requirement of SB5 is that an Urban Level of Flood Protection (ULOP) be given in specific areas of the Sacramento and San Joaquin River Basins. ULOP is defined as the level of protection necessary to withstand a 1-in-200 chance of flooding in any given year. There are five location criteria that all must be met in order for the ULOP to apply. The site was evaluated to ascertain the applicability of the ULOP criteria and determined that the proposed project does not meet the criterion of having watersheds with a contributing area of 10 or more square miles (6400 acres), and therefore, the project is not subject to SB5 legislation.

FEMA Information

The Federal Emergency Management Agency's (FEMA) Flood Insurance Study (FIS) Flood Insurance Rate Map (FIRM) encompassing the project area is FIRM Panel ID# 06061C0960H, effective November 2, 2018. As is shown in Figure 2 below, no established regulatory floodplains are located within, or adjacent to, the subject site. A Letter of Map Revision for the existing conditions floodplain is not required for this project due to having less than 1 square mile of contributary area to a conveyance system on or adjacent to the property.

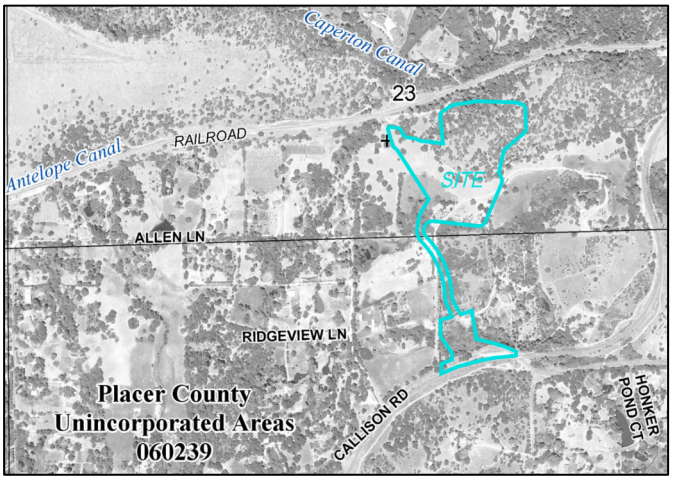


Figure 2. Portion of FEMA FIRM 06061C0960H

Hydrologic Analysis

A hydrologic analysis was conducted using HEC-HMS version 4.2.1 software for the 10-year, 24-hour, and 100-year, 24-hour storm events for the pre- and post-development conditions land uses. The HEC-HMS model was developed using data and procedures from the Placer County Flood Control and Water Conservation District's Stormwater Management Manual (Manual). The following sections describe the parameters for the Hydrologic modeling.

Existing Site Conditions

The existing site consists of undeveloped land that is primarily vegetated with grass and trees. The Antelope Canal is an existing feature that traverses the site in a generally east-west orientation (Exhibit 2 and Exhibit 3 of Appendix A). The Antelope Canal is generally used by Placer County Water Agency to convey non-potable irrigation water within Placer County. The site rises from 720 feet in the south to 928 feet in the north and has steep to moderately-steep slopes. The site's highpoint encompasses the top of a hill, and with that, runoff leaves the site to the north, south, east, and west (Exhibit 2).

Proposed Conditions

The proposed project intends to leave much of the property undisturbed by impervious cover. While all watersheds would be affected by development of the proposed project, only one watershed experiences a significant increase in impervious rate, watershed DEV04A. Watersheds DEV02B and DEV03A are the other locations where impervious features are added. Exhibit 3 in Appendix A shows the proposed site and impervious improvements.

Soils Information

The proposed project site has two types of soils. Much of the site consists of USGS Soil Type D and the remaining area of the site consists of USGS Soil Type B. Group D type soils have a low infiltration rate, which in turn leads to a high runoff potential. The Group B type soils have a moderate infiltration rate, which results in less runoff than the Group D type soils. Infiltration rates vary for different soil types as well as different land uses. Exhibit 1 in Appendix A shows the soil types in relation to the project boundary.

Land Use

Natural ground cover is modeled at 2-percent impervious cover and was used for all pre-project sheds with the exception of shed EX02. Shed EX02 contains a portion of Callison Road which was considered 100% impervious.

For the proposed site, the impervious percentage of the post-project sheds was determined based on the site plan on December 22, 2021.

Watershed Delineation

The existing and proposed watersheds were delineated based on the topography and locations where comparison points were established. There are two discharge locations which are not studied in this analysis, and therefore watersheds for these are not included. These discharge locations are to the north of the site and at both locations there is no additional impervious cover and the watershed size has been reduced. By inspection, discharge at these locations will be reduced for all storm events. The Antelope Canal crosses through the site but is not reflected in the watershed delineation. The canal is assumed to be encased for the purposes of this study. This will produce the most conservative hydrographs for sizing of downstream facilities.

For existing conditions, once comparison points were established, the total contributing area to each of them is captured in the watershed delineation. These watersheds and comparison points can be seen on Exhibit 2 in Appendix A.

For proposed conditions, the watersheds were further divided as required to capture project features. Proposed berms also modify the watersheds. These modifications are discussed further in the "Hydraulic Model Input" section of this technical memorandum. Exhibit 3 in Appendix A shows the proposed conditions watersheds.

Rainfall

The 10-year, 24-hour, and 100-year, 24-hour design storms were modeled in HEC-HMS software. The rainfall data for the design storms were taken from Table 5-A-2 of the Manual for an elevation of 1,000 feet, as summarized in Table 1.

Table 1: Rainfall Duration Depth Frequency Data

Duration	10-Year Depth	100-Year Depth
5 Minutes	0.25	0.42
15 Minutes	0.44	0.72
1 Hour	0.86	1.33
2 Hour	1.21	1.85
3 Hour	1.47	2.22
6 Hour	2.04	2.89
12 Hour	2.98	4.42
24 Hour	4.10	6.03

Rainfall Losses

For initial abstraction, consistent with the Manual's recommendations, an initial rainfall loss of zero inches was used. This is consistent with other jurisdictions since it assumes that there was rain preceding the design storm event which causes saturated soil conditions. Historically, this is consistent with storm patterns seen in the Sierra Nevada foothills and valley.

For constant loss, soil type and cover type were considered. As shown on Exhibit 1 in Appendix A, the Natural Resources Conservation Service Web Soil Survey indicated that the soils for the study area are Hydrologic Soil Groups B and D as discussed in the Soil Type section of this report. Table 2 summarizes the infiltration rate of the soils and impervious cover.

Table 2: Soil Infiltration Data

Soil Type	Infiltration Value, in / hr	
	Pervious Surface	Impervious Surface
B	0.20	0.06
D	0.08	0.02

Rainfall Transform Method

Consistent with the Manual, the Kinematic Wave transform method was used. For this method, an overland flow length, slope, and roughness are needed for both the impervious surface (Plane 1) and the pervious surface (Plane 2).

For pervious surfaces, the following data were used:

- The overland flow lengths were measured using topographic mapping, aerial imagery, and the proposed site plan; however, a maximum flow length of 600 feet was used.
- The slopes were measured from the topographic mapping and proposed site plan.

- An overland flow roughness coefficient of 0.40 was used from Table 5-5 of the Manual for poor grass cover or woods with underbrush.
- Since all the watersheds in the study area are over 50-percent pervious under pre-project and post-project conditions, the channel represents flow in a swale or ditch. The channel length and slope were measured. A channel bottom width of 8 feet and side slopes 4H:1V were used with a Manning's n of 0.040 (for vegetated channel).

For impervious surfaces, the following data were used:

- The overland flow lengths were measured using the topographic mapping, aerial imagery, and the proposed site plan; however, a maximum overland flow length of 300 feet was used.
- The slopes were measured from the topographic mapping and the proposed site plan.
- An overland flow roughness of 0.11 was used from Table 5-5 of the Manual for smooth surfaces (concrete, asphalt, or bare soil).

Hydrologic Model Results

Hydrologic Model Input

Model input was developed using the above-mentioned parameters and a HEC-HMS model was created to analyze the existing and proposed site conditions. Table 3 shows an abbreviated table of model input. Appendix B contains full hydrologic model input and output.

Table 3: Abridged HEC-HMS Input

Shed Name	Shed Impervious Percent	Area, square miles	Plane 1 (Impervious Surface)				Plane 2 (Pervious Surface)				Channel				
			Channelized Flowpath Length, feet	Slope, ft/ft	Infiltration Rate, in/hr	Percent of Subshed	Overland Flowpath Length, feet	Slope, ft/ft	Infiltration Rate, in/hr	Percent of Subshed	Length, feet	Slope, ft/ft	Manning's n	Bottom Width, ft	Side Slope (H)
Pre-Project Conditions															
EX01	2%	0.0283	-	-	-	0%	600	0.142	0.20	100%	1,300	0.142	0.04	8	4
EX02	3%	0.0155	300	0.043	0.02	3%	600	0.061	0.08	97%	1,146	0.043	0.04	8	4
EX03	2%	0.0055	-	-	-	0%	600	0.066	0.08	100%	726	0.066	0.04	8	4
EX04	2%	0.0274	-	-	-	0%	600	0.138	0.08	100%	1,587	0.138	0.04	8	4
EX05	2%	0.0057	-	-	-	0%	600	0.080	0.20	100%	647	0.080	0.04	8	4
EX06	2%	0.0205	-	-	-	0%	600	0.066	0.20	100%	1,187	0.066	0.04	8	4
EX07	2%	0.0025	-	-	-	0%	335	0.119	0.08	100%	335	0.119	0.04	8	4
Post-Project Conditions															
DEV01	2%	0.0259	-	-	-	0%	600	0.142	0.20	100%	1,300	0.142	0.04	8	4
DEV02A	2%	0.0073	-	-	-	0%	600	0.058	0.08	100%	813	0.058	0.04	8	4
DEV02B	46%	0.0054	300	0.030	0.02	46%	162	0.105	0.08	54%	586	0.030	0.04	8	4
DEV02C	2%	0.0028	-	-	-	0%	560	0.052	0.08	100%	560	0.052	0.04	8	4
DEV03A	4%	0.0039	108	0.014	0.02	4%	459	0.076	0.08	96%	459	0.014	0.04	8	4
DEV03B	2%	0.0016	-	-	-	0%	264	0.038	0.08	100%	264	0.038	0.04	8	4
DEV04A	28%	0.0191	300	0.119	0.02	28%	101	0.009	0.08	72%	1,510	0.009	0.04	8	4
DEV04B	2%	0.0129	-	-	-	0%	600	0.069	0.08	100%	1,185	0.069	0.04	8	4
DEV05	2%	0.0057	-	-	-	0%	600	0.080	0.20	100%	647	0.080	0.04	8	4
DEV06	2%	0.0205	-	-	-	0%	600	0.149	0.20	100%	1,187	0.149	0.04	8	4
DEV07	2%	0.0205	-	-	-	0%	335	0.119	0.08	100%	335	0.119	0.04	8	4

Hydrologic Model Output

The hydrologic model output are runoff hydrographs. There are separate hydrographs for each modeled shed. A summary of pre-project and post-project peak runoff rates and volumes for each shed are presented in Table 4 for the 10- and 100-year, 24-hour storm events. A HEC-HMS global data output table is provided in Appendix B.

Table 4: Watershed Peak Flows

Shed Name	Shed Area, acres	XPSWMM Node	Peak Flow, cfs		Volume, acre-feet	
			10-Year, 24-Hour	100-Year, 24-hour	10-Year, 24-Hour	100-Year, 24-hour
Pre-Project Conditions						
EX01	18.11	Node045	15.1	31.7	1.3	3.0
EX02	9.93	Node033	8.4	15.8	1.8	3.4
EX03	3.54	Node021	3.0	5.8	0.6	1.2
EX04	17.51	Node015	17.8	33.5	3.1	5.9
EX05	3.64	Node037	2.6	5.5	0.3	0.6
EX06	13.10	Offsite001	8.6	18.9	0.9	2.2
EX07	1.60	Node053	2.0	3.8	0.3	0.5
		Total	**57.5**	**115.0**	**8.3**	**16.8**
Post-Project Conditions						
DEV01	16.60	Node045	13.9	29.0	1.2	2.8
DEV02A	4.65	Node033	3.9	7.4	0.8	1.6
DEV02B	3.47	NodeP077	5.9	11.1	0.9	1.4
DEV02C	1.82	NodeP075	1.5	2.8	0.3	0.6
DEV03A	2.52	Node021	2.5	4.7	0.5	0.9
DEV03B	1.02	NodeP071	1.1	2.1	0.2	0.3
DEV04A	12.24	NodeP065	16.0	29.9	2.7	4.7
DEV04B	8.23	NodeP047	7.2	13.6	1.5	2.8
DEV05	3.64	Node037	2.6	5.5	0.3	0.6
DEV06	13.10	Offsite001	8.6	18.9	0.9	2.2
DEV07	1.60	Node053	2.0	3.8	0.3	0.5
		Total	**65.2**	**128.8**	**9.6**	**18.4**

Hydraulic Analysis

Existing Site Conditions

In the southern part of the site, an existing storm drainage conveyance system is in place. It consists of a series of pipes and field inlets that convey storm water from the eastern side of the site to the western side, which is discharged to a natural vegetated channel.

Proposed Site Conditions

The proposed project would utilize surface and subsurface infrastructure to convey flows to storm water quality facilities and detention basins before discharging from the site. The proposed conveyance systems would include

ditches, drop inlets, and storm drain pipes. Storm water outfalls would incorporate dissipation to reduce the energy of the water leaving the site as to not create or exacerbate sedimentation and erosion.

Hydraulic Model Results

Hydraulic Model Input

A hydraulic model was developed using XPSWMM version 2019.1.3 software. Hydrographs from the hydrologic analysis were used as input for the pre-project and post-project hydraulic models at the XPSWMM model nodes indicated in Table 4 (above) for each shed. The model routes the flow hydrographs through the storm conveyance system and calculates flows and water surface elevations throughout the modeled system.

Two proposed berms will split the pre-project shed EX02 into post-project sheds DEV02A, DEV02B, and DEV02C. The western proposed berm will split pre-project shed EX03 into post-project sheds DEV03A and DEV03A. The western berm will reroute runoff from DEV03A to the north into the proposed detention basin, increasing the tributary area flowing to Node Outfall001 and decreasing the tributary area flowing to Node Outfall002. In addition, the project grading will split the pre-project shed EX04 into post-project sheds DEV04A and DEV04B, with runoff from shed DEV04A being routed through a series of ponds and a detention basin. The pre-project and post-project modeled systems (nodes and links) are shown in Appendix B.

Input for the XPSWMM model is described below:

- As required by the Manual, the existing culvert under Callison Road and the existing culvert under the railroad tracks were modeled as 50-percent blocked for pre-project and post-project conditions.
- Comparison points CP-2, CP-3, and CP-4 are located along open channels, downstream of the project boundary. Based on the topographic mapping and aerial imagery, each of these open channels discharge to an existing storage pond. Downstream boundary conditions were established at these outfall locations assuming that each storage pond was full at the start of the storm event.
- The existing topography provides storage at three locations in the study area. The elevation-storage data was determined from the topographic data for pre-project and post-project conditions.
- A Manning's n value of 0.04 was used for grass-lined channels, and a Manning's n of 0.06 was used for rock-lined ditches.
- A Manning's n value of 0.015 was used for existing and proposed conduits based on Table 6-3 of the Manual and Addendum 1 dated July 1997, requiring that a minimum Manning's n value of 0.015 be used for sizing conduits.
- Three proposed trapezoidal ditches were modeled.
- Two proposed detention basins were modeled, based on the site plan and topography. In addition, a series of ponds are included with the proposed project for aesthetics. Three of these ponds will provide additional flood control storage. The stage-storage relationship for the detention basins and ponds are summarized in Table 5.
- At transitions from open channels to piped systems, an entrance loss coefficient of 0.5 was used and at transitions from piped systems to open channels or detention basins, an exit loss coefficient of 1.0 was used.
- Detention basin outlet structures consist of an orifice at the basin bottom elevation, a circular weir, and an emergency spillway. Basin outlet characteristics are summarized in Table 6.

Table 5: Detention Basin Stage-Storage

Elevation, feet NGVD29	Depth, feet	Area, square feet	Area, acres	Total Volume, acre-feet
Pond #1				
799.5	0.0	1,432	0.03	0.00
799.8	0.3	1,585	0.04	0.01
800.5	1.0	1,965	0.05	0.04
801.5	2.0	2,562	0.06	0.09
802.5	3.0	3,543	0.08	0.16
Pond #2				
763	0.0	3,916	0.09	0.00
763.3	0.3	4,469	0.10	0.03
764	1.0	4,585	0.11	0.10
765	2.0	5,288	0.12	0.21
766	3.0	6,217	0.14	0.35
Pond #5				
748	0.0	5,457	0.13	0.00
748.2	0.2	5,732	0.13	0.03
749	1.0	6,391	0.15	0.13
750	2.0	7,325	0.17	0.29
Northern Detention Basin				
740	0.0	1,315	0.03	0.00
741	1.0	3,392	0.08	0.05
742	2.0	6,537	0.15	0.17
743	3.0	9,677	0.22	0.35
744	4.0	14,179	0.33	0.63
745	5.0	18,731	0.43	1.01
Southern Detention Basin				
726	0.0	2,879	0.07	0.00
727	1.0	3,533	0.07	0.07
728	2.0	4,244	0.09	0.15
729	3.0	5,011	0.10	0.25
730	4.0	5,835	0.11	0.35
731	5.0	6,716	0.12	0.46

Yellow highlighted rows indicate pond. Pond volume is not included in the available storage volume for flood control.

Table 6: Detention Basin Outlet Structures

	Orifice Diameter, inches	Orifice Elevation, feet NGVD29	Circular Weir Diameter, inches	Circular Weir Elevation, feet NGVD29	Outlet Pipe Diameter, inches	Emergency Spillway Elevation, feet NGVD29
Northern Detention Basin	2	740.00	24	744.75	12	745.00
Southern Detention Basin	5	726.00	36	730.20	18	731.00

Hydraulic Model Results

The output from the XPSWMM model calculates water surface elevations at nodes and flows at links for the comparison points as shown on Exhibit 2 and 3 in Appendix A. Table 7 shows the peak flows during the 10- and 100-year storm events at each comparison point during pre-project and post-project conditions.

Table 7: Peak Flow at Comparison Points

Comparison Point	XPSWMM Link	Peak Flow, cubic feet per second (cfs)			
		10-Year, 24-Hour Storm		100-Year, 24-Hour Storm	
		Pre-Project	Post-Project	Pre-Project	Post-Project
CP-1	Link041	0.0	0.0	14.3	10.6
CP-2	Link023	9.8	8.9	18.7	16.7
CP-3	Link017	3.0	1.1	5.7	2.1
CP-4	Link005	0.1	0.4	11.1	10.5

The proposed project and mitigation measures will result in a reduction in the 100-year, 24-hour peak flow at all four comparison points. The 10-year, 24-hour peak flow will be reduced at all comparison points except at CP-4. Because CP-4 is downstream of an existing storage area, under existing conditions almost the entire runoff volume from Shed EX04 during the 10-year storm event is stored. The existing conditions flow out of the storage area at CP-4 is 0.1 cfs, and during post-project conditions the flow increases to 0.4 cfs. This small increase can be considered insignificant.

Water surface elevations at each model node are summarized in Appendix B for the pre-project and post-project conditions during the 10-year and 100-year storm events. The 100-year flood depth is also included in Appendix B by comparing the 100-year water surface elevation and the ground elevation. A negative value indicates available freeboard, and a positive value indicates ponding. During post-project conditions, the only node with a water surface elevation greater than the ground elevation is Node P049, the location of the Northern Detention Basin, where the water surface is 0.1 feet above the spillway elevation. The Northern Detention Basin is designed to spill in the event of a 100-year event.

Velocity and flow rates in each model link are summarized in Appendix B for the pre-project and post-project conditions during the 10-year and 100-year storm events. Overland flow links are highlighted in yellow. During post-project conditions, overland flow will not occur during the 10-year storm event.

Table 6-1 of Addendum 1 to the Manual summarizes the allowable street encroachments. For local roads, the traveled way must remain clear and not convey runoff during the 10-year storm and the hydraulic grade line must be a minimum of 1-foot below building pads during the 100-year storm.

Under existing conditions, the low point in Callison Road near the entrance to the project site is at an elevation of approximately 733 feet NGVD29 and the low point in the entrance road to the project site is 732 feet NGVD29. As part of the proposed project, Callison Road will be raised to an elevation of 736 feet NGVD29 at the entrance to the project site and the low point in the entrance road will be raised to 734 feet NGVD29. A comparison of the pre-project and post project results near the entrance to the project site is summarized as follows:

- Water Surface Elevation at the Upstream End of Callison Road:
  - The pre-project water surface elevation at Node 047 (the upstream end of the culvert under Callison Road) is 733.1 feet NGVD29 (0.1 feet of flooding above the ground at 733 feet NGVD29) during the 10-year, 24-hour storm and 733.4 feet NGVD29 (0.4 feet of flooding) during the 100-year, 24-hour storm.
  - The post-project water surface elevation at NodeP091 (the upstream end of the culvert under Callison Road) is 733.8 feet NGVD29 (2.2 feet of freeboard above the ground at 736 feet NGVD29) during the 10-year, 24-hour storm and 735.1 feet NGVD29 (0.9 feet of freeboard) during the 100-year, 24-hour storm.
- Water Surface Elevation at the Project Entrance Road
  - The pre-project water surface elevation in Node 026 (at the low point in the entrance road) is 732.4 feet NGVD29 (0.4 feet of flooding above the ground at 732 feet NGVD29) during the 10-year, 24-hour storm and 732.6 feet NGVD29 (0.6 feet of flooding) during the 100-year, 24-hour storm.
  - There will be no flooding at the entrance road during post-project conditions.
- Overland Flow:
  - Under existing conditions, during the 10-year storm event, there is approximately 4.9 cfs of overland flow across the entrance road (Link027) and 0.7 cfs of overland flow across Callison Road (Link047). During the 100-year storm event, there is approximately 12.3 cfs of overland flow during across the entrance road (Link027) and 2.6 cfs of overland flow across Callison Road (Link047).
  - Raising the road near the entrance to the site will eliminate the overland flow across the entrance road and shift the location of overland release along Callison Road to the west, at the existing elevation of 732 feet NGVD29 (Link64). The 100-year overland flow across Callison Road will be reduced to 1.3 cfs and the 10-year overland flow will be eliminated.
    - If the existing 12-inch culvert under Callison Road is upsized to an 18-inch, the overland flow across Callison Road would be eliminated during both the 10-year and 100-year storm events.
- The proposed project and mitigation measures result in a reduction in water surface elevations near the site entrance. Raising the low areas in Callison Road and the entrance road will increase the freeboard and satisfy the requirements of Table 6-1 of Addendum 1 to the Manual.

The post-project 100-year, 24-hour model was run assuming the culvert under Callison Road and the culvert under the entry to the project site are 100-percent blocked. Blocked storm drains during the 100-year storm event will result in overland flow of 6.8 cfs across the entrance road, an overland flow across Callison Road, west of the project of 2.6 cfs, and an overland flow of 1.0 cfs across Callison Road to the proposed detention basin

Storm Water Quality & Hydromodification

Storm water is a valuable resource, and it is the intention of the proposed project to maintain storm water quality using source controls and Low Impact Development (LID) measures. These measures, through structures and operations, infiltration, evapotranspiration, and biotreatment can provide water quality treatment and recharge groundwater supplies, protect and enhance natural habitat and biodiversity, and add aesthetic value to new development.

The proposed project would create more than one acre of impervious surface. Due to this, it is considered a Hydromodification Management Project per the Phase II MS4 Permit and is required to provide storm water treatment for the 85th percentile event and hydromodification for the 2-year event. A multi-layered approach is taken to ensure that these requirements are met per the West Placer Storm Water Quality Design Manual (SWQDM). The discussion below outlines the types of measures that could be incorporated into the project to meet the requirements of the SWQDM.

The first line of defense in maintaining storm water quality is to keep urban runoff from commingling with clean water through the use of Source Controls. This can be done using structural and operational measures at the pollutant source. At this level of analysis, source control measures are not included however, measures may be specified at the improvement plan level of design and implemented with construction.

Potential structural measures may include covering of trash receptacles, using efficient irrigation to reduce overspray, and connecting industrial floor drains to the sanitary sewer system instead of the storm drainage system. Operational measures may include using good housekeeping measures to minimize the generation of pollutants, make stormwater pollution prevention measures a part of standard operating procedures, and employee training programs.

Storm water runoff into local creeks could introduce pollutants and could cause hydromodification, which would be mitigated by implementing various LID features including vineyards and disconnected impervious areas. Vegetated swales and bioretention ponds are not proposed at this time, however, they may be considered as more information is developed for the site. These LID measures not only treat runoff through natural physical and biological treatment processes but also reduce the amount of runoff through infiltration and evapotranspiration. This will keep developed flows from degrading downstream creek systems due to erosion; while, at the same time, capture and remove urban pollutants from runoff flows from the developed areas prior to discharging the treated flows from the site.

The proposed project has existing vineyard plantings incorporated throughout the site. Vineyards decrease storm water runoff volume through increased infiltration, reduce amount of pollutants to reach downstream, are aesthetically pleasing, and have a cooling effect through shade and evapotranspiration. The vineyard area provides significant LID credit and is a major source of infiltration for the site. A rate of 50% of the existing vineyard area identified on the SWQ exhibit included in Appendix C is used for LID credit.

Disconnecting impervious areas is another technique that will be implemented with the project. This includes rooftops or other hard surfaces such as streets/parking lots or sidewalks that drain directly to pervious areas such as landscape. The design parameter of twice the area of impervious to pervious area is used. Disconnected impervious areas have the following benefits of decreasing runoff volume, reducing peak flow rates, and encouraging groundwater recharge.

The SWQP Template was completed using the topographic and cover information presented herein and is included with this assessment in Appendix C. Also included in Appendix C is a figure showing the drainage management areas for LID. Storm water quality compliance is demonstrated on Form 3-6 with having zero untreated volume in Item 14 and hydromodification compliance is demonstrated on Form 4-3, Item 16.

Construction BMPs

Discharges of storm water from a site during construction activities are regulated by the State's Construction General Permit (CGP). The CGP requires that all construction sites that disturb more than 1-acre have a Storm Water Pollution

Prevention Plan (SWPPP). This document will be created before the commencement of construction to address how storm water will be managed and treated prior to release from the site during construction. The SWPPP is a living document which will be updated during the course of construction as changing conditions arise.

The SWPPP identifies and describes the necessary Best Management Practices (BMPs) that will eliminate or reduce the discharge of pollutants from construction sites to waters of the State. BMPs are generally divided into six categories: erosions control, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and materials pollution control. BMPs include measures such as hydroseeding and applying straw mulch to disturbed areas. They also include the use of straw wattles/fiber rolls, silt fences, sedimentation basins, drain inlet protection, stabilized construction access, and proper material management. It is expected that a combination of these measures will be implemented during the construction phase of the proposed project.

Conclusion

This TM provides detailed modeling and analysis for the existing conditions and proposed project to identify potential mitigation measures for storm water quality, hydromodification, and flood control. The drainage solutions for the site include a combination of LID measures and detention basins which could treat and mitigate the small increase in impervious area anticipated with the proposed project in addition to the conveyance system required to safely discharge the flows to the property boundary. The LID measures and detention basins would provide storm water quality treatment and hydromodification for the 85th percentile event and the 2-year 24-hour event, respectively. The detention basins are sized to mitigate for the 10-year and 100-year rainfall events and reduce the flow from the post-project site to pre-project levels. Prior to construction, analysis will be conducted to determine the final facilities' sizes and locations necessary to convey flows, provide storm water quality and hydromodification, and mitigate discharges from the site to at or below existing conditions for flood control events and to provide protection to the site.

Limitations

This technical drainage assessment in support of Project 8 was prepared to the best of our knowledge and judgment to satisfy our understanding of its purposes. It was prepared in a manner consistent with that level of care and skill ordinarily exercised by other members of MacKay & Somps' profession practicing in the same locality, under similar conditions, and at the date the services are provided. Our conclusions, opinions, and recommendations contained within this report are based on our professional judgement and experience in the general geographic area in which the project is located. Some data may have been prepared using information from outside sources that have varying degrees of reliability. It is possible that conditions could vary between projects in the same general area. The use or misuse of this information other than for its intended purpose, as noted, is at the sole risk of the party using the information. MacKay & Somps makes no other representations, guarantees, or warranties, express or implied, regarding the instrument of professional services, communications (oral or written), estimates or reports, and/or opinions contained herein.

Appendix A

Exhibits

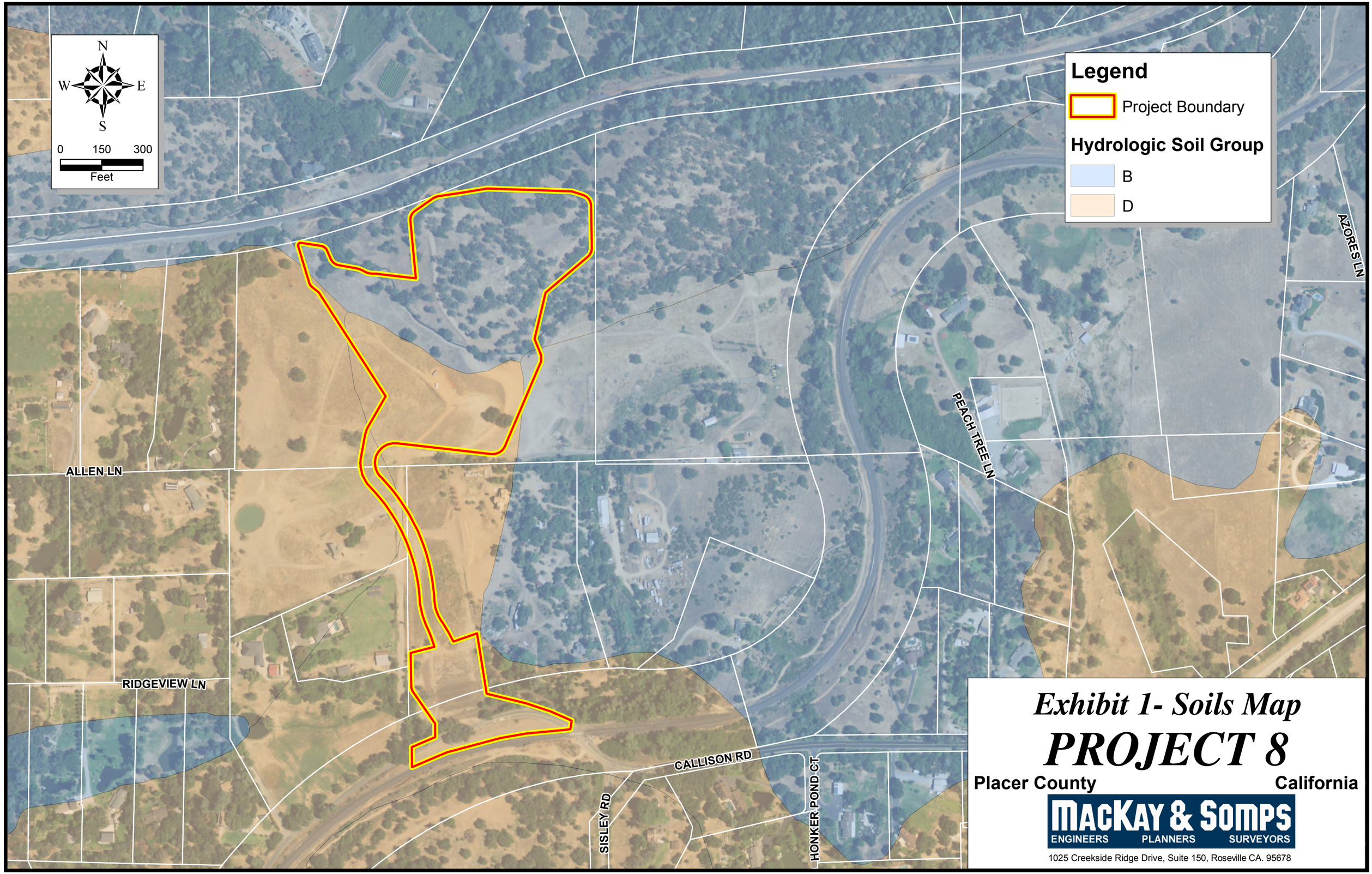
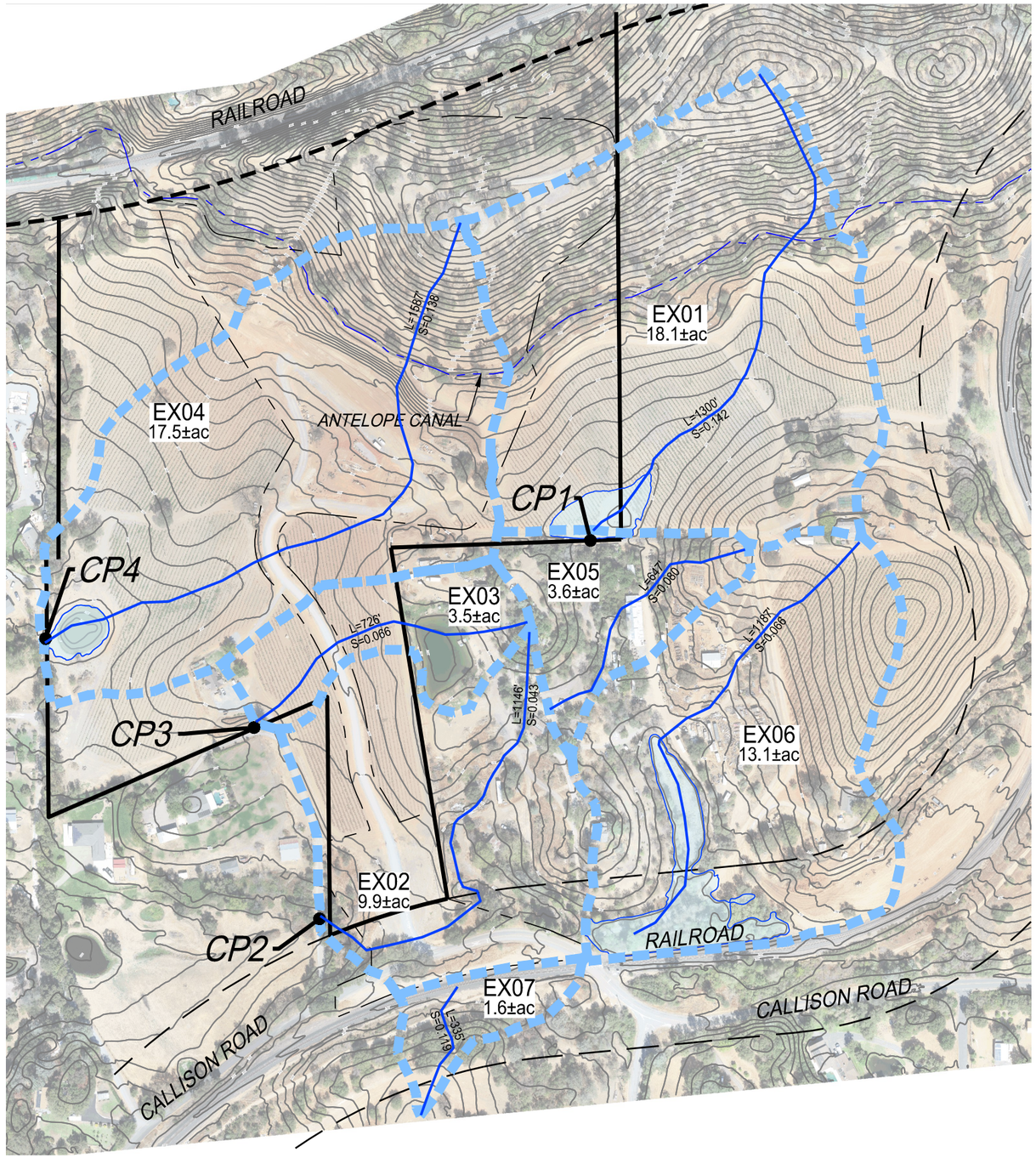


Exhibit 1- Soils Map

PROJECT 8

Placer County **California**

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville CA. 95678



N

0 150 300 600

SCALE: 1"=300'

LEGEND

- PROJECT SITE BOUNDARY
- PROPERTY BOUNDARY
- SHED BOUNDARY
- EXISTING STORAGE
- EX01 18.1± ac. — SUBSHED NAME & AREA
- L=170' / S=0.020 — WATER COURSE LENGTH & SLOPE
- CP2 — COMPARISON POINT

Exhibit 2
Existing Site

Project 8

Placer County
Scale 1"=150'
Datum: NGVD29

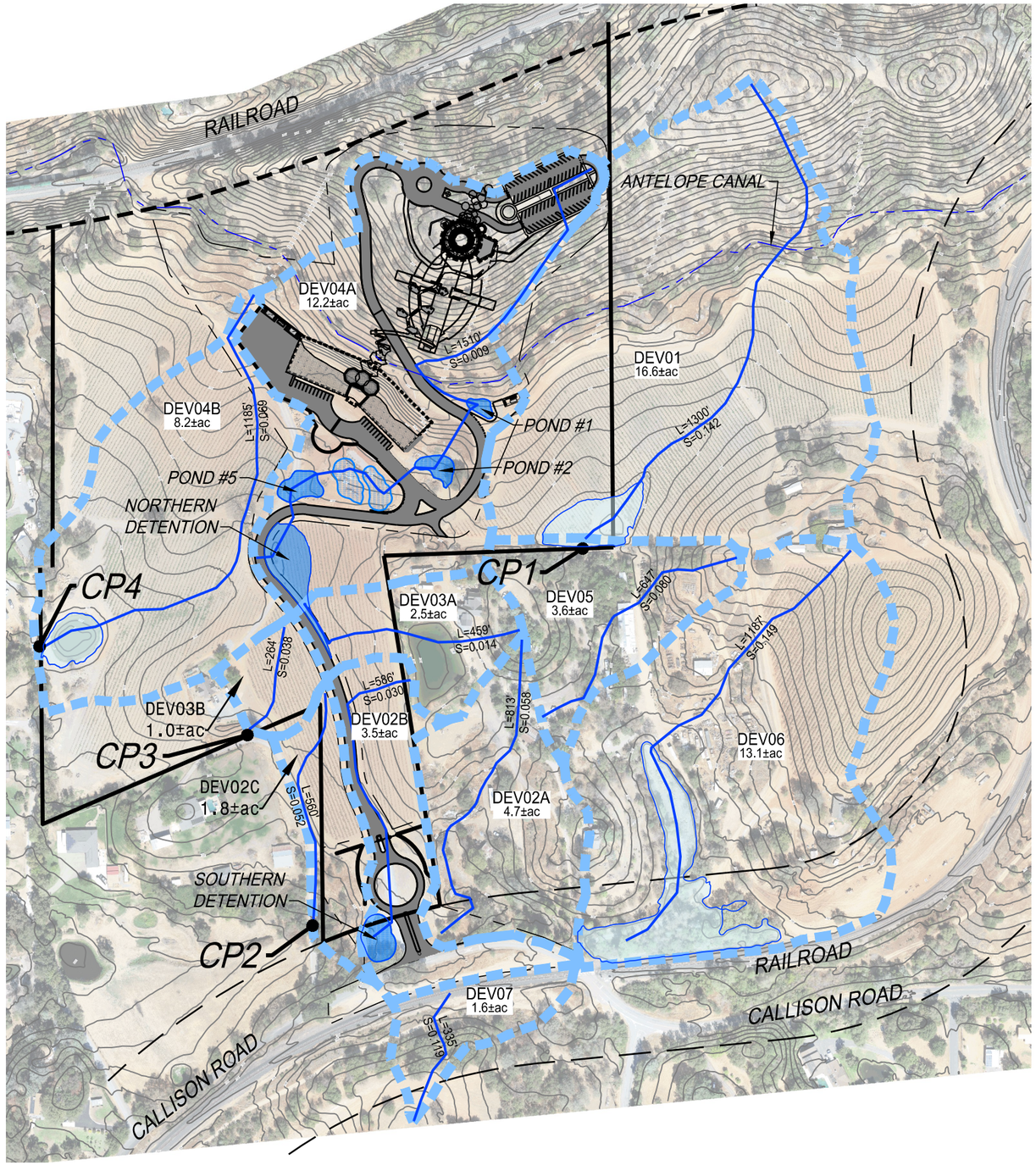
MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

California
March 2022
18511

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3-02-2022 10:37:57 cgwoltney P:\18511\MstrPln\SD\SL TM\1stSub\CAD Files\Exhibit 2 - Existing Project Site.dwg
[1] P:\18511\MstrPln\SD\SL TM\1stSub\CAD Files\Existing Sheds.dwg [2] P:\18511\MstrPln\SD\SL TM\1stSub\CAD Files\RegionalContours.dwg [3] P:\18511\SRV\Topo\Aerial\D-TP-FLD-PW_OG.dwg [4] P:\18511\Images\Photos\Other\2018NAIPWineryGROUND-Fade





0 150 300 600

SCALE: 1"=300'

LEGEND

- PROJECT SITE BOUNDARY
- PROPERTY BOUNDARY
- SHED BOUNDARY
- EXISTING STORAGE
- PROPOSED STORAGE
- DEV01 16.6±ac — SUBSHED NAME & AREA
- L=170' / S=0.020 — WATER COURSE LENGTH & SLOPE
- CP2 — COMPARISON POINT

Exhibit 3
Proposed Project Site

Project 8

Placer County
Scale 1"=300'
Datum: NGVD29

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PRELIMINARY - Subject to Revision

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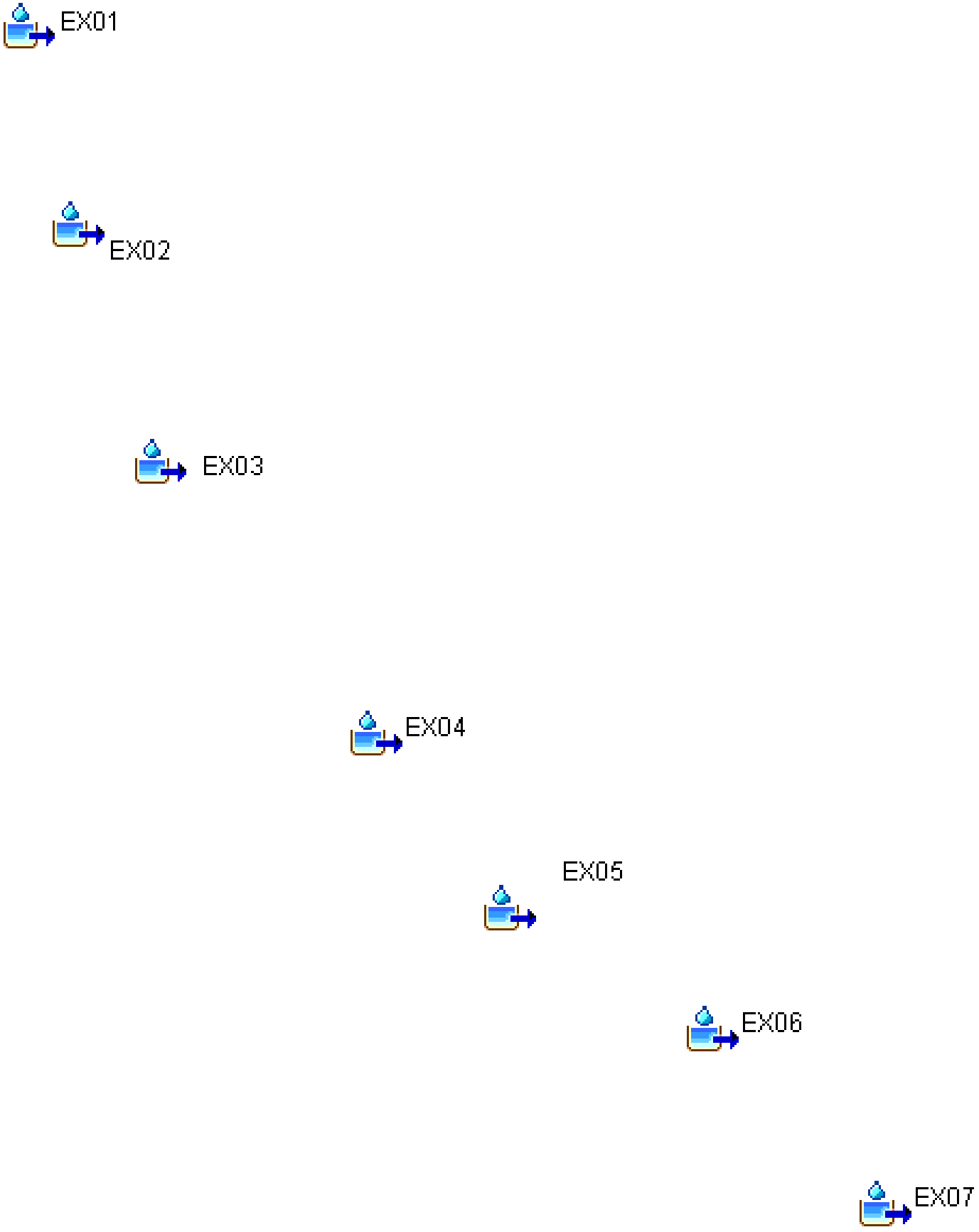
Appendix B

Hydrology & Hydraulics

Hydrologic Data

Shed Name	Shed Area, acres	Shed Impervious Percent	Chennelized/Piped Flow			Overland Flow			HEC-HMS Input														
										Plane 1 (Impervious Surface)					Plane 2 (Pervious Surface)					Channel				
			Longest Flow Path Length, feet	Upstream Elevation (NGVD29)	Downstream Elevation (NGVD29)	Longest Flow Path Length, feet	Upstream Elevation (NGVD29)	Downstream Elevation (NGVD29)	Area, square miles	Channelized Flowpath Length, feet	Slope, ft/ft	Roughness	Infiltration Rate, in/hr	Percent of Subshed	Overland Flowpath Length, feet	Slope, ft/ft	Roughness	Infiltration Rate, in/hr	Percent of Subshed	Length, feet	Slope, ft/ft	Manning's n	Bottom Width, ft	Side Slope (H)
Pre-Project Conditions																							
EX01	18.11	2%	-	-	-	1,300	941	756	0.0283	-	-	-	-	0%	600	0.142	0.40	0.20	100%	1,300	0.142	0.04	8	4
EX02	9.93	3%	332	730	717	814	780	730	0.0155	300	0.043	0.11	0.02	3%	600	0.061	0.40	0.08	97%	1,146	0.043	0.04	8	4
EX03	3.54	2%	-	-	-	726	780	732	0.0055	-	-	-	-	0%	600	0.066	0.40	0.08	100%	726	0.066	0.04	8	4
EX04	17.51	2%	-	-	-	1,587	926	707	0.0274	-	-	-	-	0%	600	0.138	0.40	0.08	100%	1,587	0.138	0.04	8	4
EX05	3.64	2%	-	-	-	647	811	759	0.0057	-	-	-	-	0%	600	0.080	0.40	0.20	100%	647	0.080	0.04	8	4
EX06	13.10	2%	-	-	-	1,187	821	743	0.0205	-	-	-	-	0%	600	0.066	0.40	0.20	100%	1,187	0.066	0.04	8	4
EX07	1.60	2%	-	-	-	335	782	742	0.0025	-	-	-	-	0%	335	0.119	0.40	0.08	100%	335	0.119	0.04	8	4
Post-Project Conditions																							
DEV01	16.60	2%	-	-	-	1,300	941	756	0.0259	-	-	-	-	0%	600	0.142	0.40	0.20	100%	1,300	0.142	0.04	8	4
DEV02A	4.65	2%	-	-	-	813	780	733	0.0073	-	-	-	-	0%	600	0.058	0.40	0.08	100%	813	0.058	0.04	8	4
DEV02B	3.47	46%	586	744	727	162	761	744	0.0054	300	0.030	0.11	0.02	46%	162	0.105	0.40	0.08	54%	586	0.030	0.04	8	4
DEV02C	1.82	2%	-	-	-	560	744	715	0.0028	-	-	-	-	0%	560	0.052	0.40	0.08	100%	560	0.052	0.04	8	4
DEV03A	2.52	4%	108	745	744	459	780	745	0.0039	108	0.014	0.11	0.02	4%	459	0.076	0.40	0.08	96%	459	0.014	0.04	8	4
DEV03B	1.02	2%	-	-	-	264	742	732	0.0016	-	-	-	-	0%	264	0.038	0.40	0.08	100%	264	0.038	0.04	8	4
DEV04A	12.24	28%	1,510	920	740	101	921	920	0.0191	300	0.119	0.11	0.02	28%	101	0.009	0.40	0.08	72%	1,510	0.009	0.04	8	4
DEV04B	8.23	2%	-	-	-	1,185	789	707	0.0129	-	-	-	-	0%	600	0.069	0.40	0.08	100%	1,185	0.069	0.04	8	4
DEV05	3.64	2%	-	-	-	647	811	759	0.0057	-	-	-	-	0%	600	0.080	0.40	0.20	100%	647	0.080	0.04	8	4
DEV06	13.10	2%	-	-	-	1,187	920	743	0.0205	-	-	-	-	0%	600	0.149	0.40	0.20	100%	1,187	0.149	0.04	8	4
DEV07	1.60	2%	-	-	-	335	782	742	0.0025	-	-	-	-	0%	335	0.119	0.40	0.08	100%	335	0.119	0.04	8	4

Existing HEC-HMS



Project: Penryn Winery Simulation Run: Pre-Project 10-Yr

Start of Run: 01Jan2014, 00:00 Basin Model: Pre-Project
End of Run: 02Jan2014, 00:00 Meteorologic Model: 10-Yr, 24-Hr
Compute Time: 03Feb2022, 12:25:53 Control Specifications: Penryn

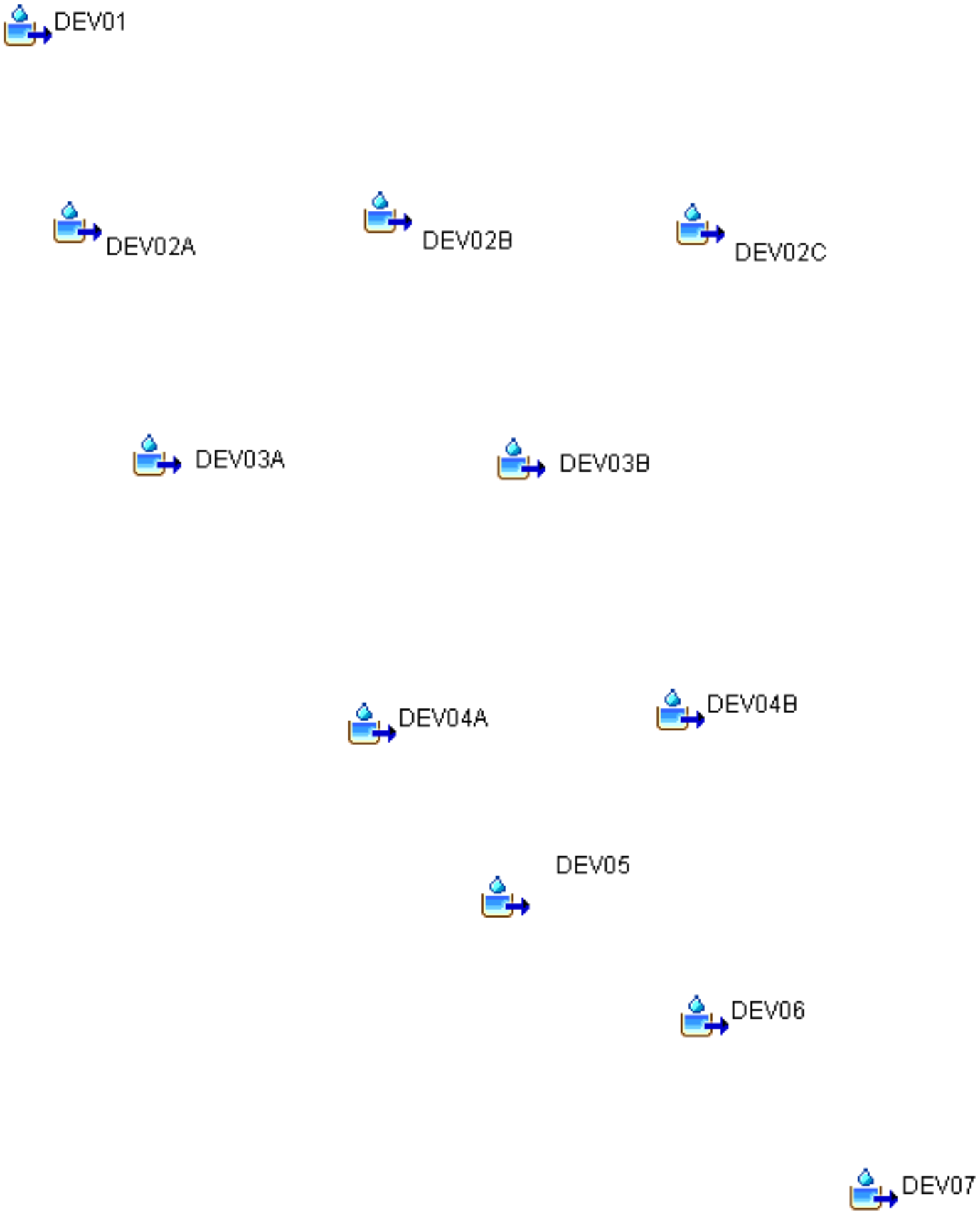
Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
EX01	0.0283	15.1	01Jan2014, 12:18	0.86
EX02	0.0155	8.4	01Jan2014, 12:18	2.17
EX03	0.0055	3.0	01Jan2014, 12:18	2.11
EX04	0.0274	17.8	01Jan2014, 12:17	2.12
EX06	0.0205	8.6	01Jan2014, 12:26	0.86
EX05	0.0057	2.6	01Jan2014, 12:23	0.86
EX07	0.0025	2.0	01Jan2014, 12:12	2.13

Project: Penryn Winery Simulation Run: Pre-Project 100-Yr

Start of Run: 01Jan2014, 00:00 Basin Model: Pre-Project
End of Run: 02Jan2014, 00:00 Meteorologic Model: 100-Yr, 24-Hr
Compute Time: 03Feb2022, 12:27:00 Control Specifications: Penryn

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
EX01	0.0283	31.7	01Jan2014, 12:14	2.02
EX02	0.0155	15.8	01Jan2014, 12:16	4.08
EX03	0.0055	5.8	01Jan2014, 12:16	4.02
EX04	0.0274	33.5	01Jan2014, 12:14	4.04
EX06	0.0205	18.9	01Jan2014, 12:17	2.01
EX05	0.0057	5.5	01Jan2014, 12:16	2.02
EX07	0.0025	3.8	01Jan2014, 12:08	4.06

Proposed HEC-HMS



Project: Penryn Winery Simulation Run: Post-Project 10-Yr

Start of Run: 01Jan2014, 00:00 Basin Model: Post-Projec
End of Run: 02Jan2014, 00:00 Meteorologic Model: 10-Yr, 24-H
Compute Time: DATA CHANGED, RECOMPUTE Control Specifications: Penryn

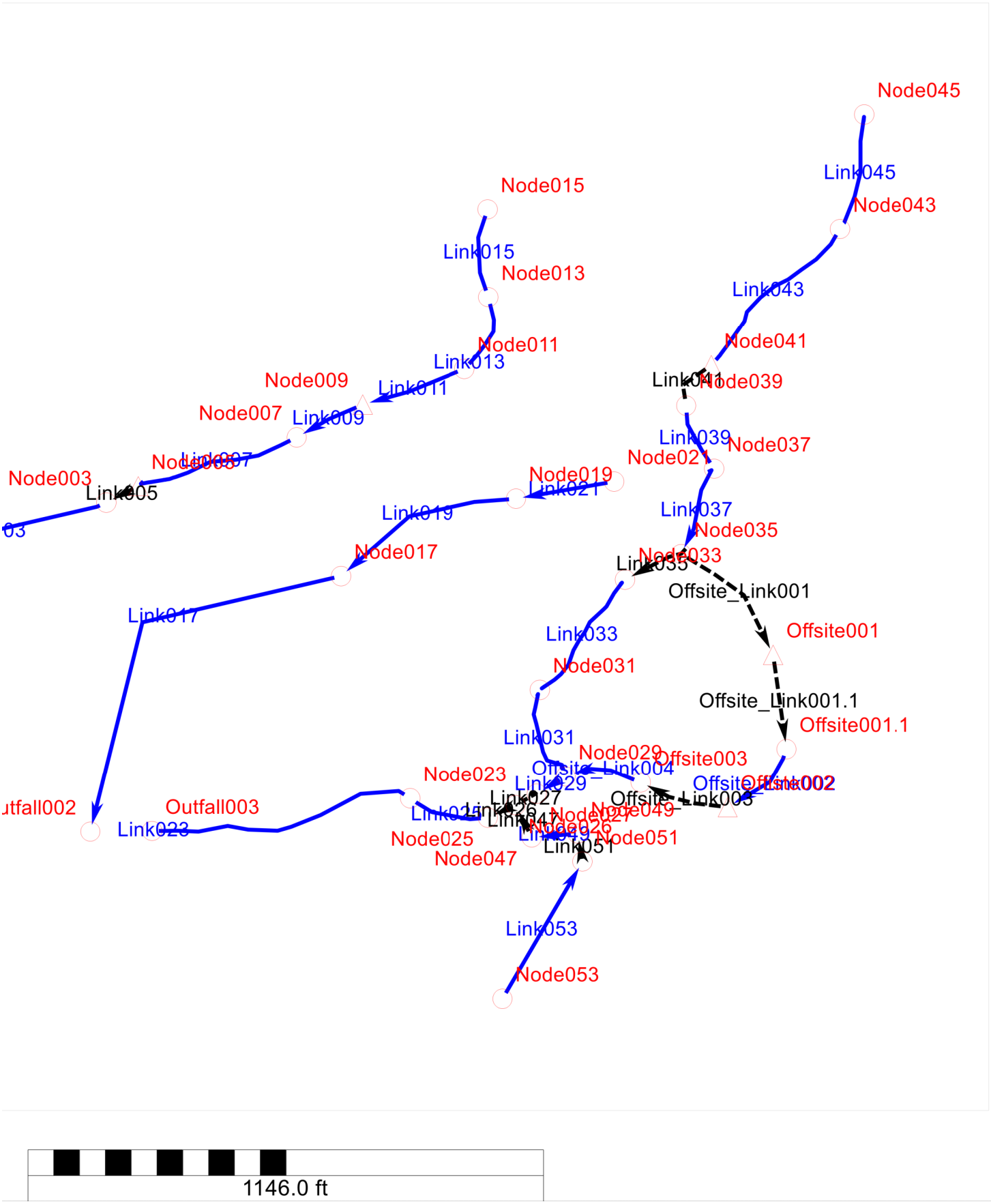
Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
DEV01	0.0259	13.9	01Jan2014, 12:18	0.86
DEV02A	0.0073	3.9	01Jan2014, 12:19	2.11
DEV03A	0.0039	2.5	01Jan2014, 12:16	2.20
DEV04A	0.0191	16.0	01Jan2014, 12:11	2.65
DEV06	0.0205	8.6	01Jan2014, 12:26	0.86
DEV05	0.0057	2.6	01Jan2014, 12:23	0.86
DEV07	0.0025	2.0	01Jan2014, 12:12	2.13
DEV02B	0.0054	5.9	01Jan2014, 12:07	2.99
DEV02C	0.0028	1.5	01Jan2014, 12:19	2.11
DEV03B	0.0016	1.1	01Jan2014, 12:15	2.12
DEV04B	0.0129	7.2	01Jan2014, 12:19	2.11

Project: Penryn Winery Simulation Run: Post-Project 100-Yr

Start of Run: 01Jan2014, 00:00 Basin Model: Post-Projec
End of Run: 02Jan2014, 00:00 Meteorologic Model: 100-Yr, 24-H
Compute Time: DATA CHANGED, RECOMPUTE Control Specifications: Penryn

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
DEV01	0.0259	29.0	01Jan2014, 12:15	2.02
DEV02A	0.0073	7.4	01Jan2014, 12:16	4.02
DEV03A	0.0039	4.7	01Jan2014, 12:12	4.12
DEV04A	0.0191	29.9	01Jan2014, 12:09	4.58
DEV06	0.0205	18.9	01Jan2014, 12:17	2.01
DEV05	0.0057	5.5	01Jan2014, 12:16	2.02
DEV07	0.0025	3.8	01Jan2014, 12:08	4.06
DEV02B	0.0054	11.1	01Jan2014, 12:06	4.94
DEV02C	0.0028	2.8	01Jan2014, 12:16	4.02
DEV03B	0.0016	2.1	01Jan2014, 12:12	4.05
DEV04B	0.0129	13.6	01Jan2014, 12:16	4.02

XPS Existing Model Plan View

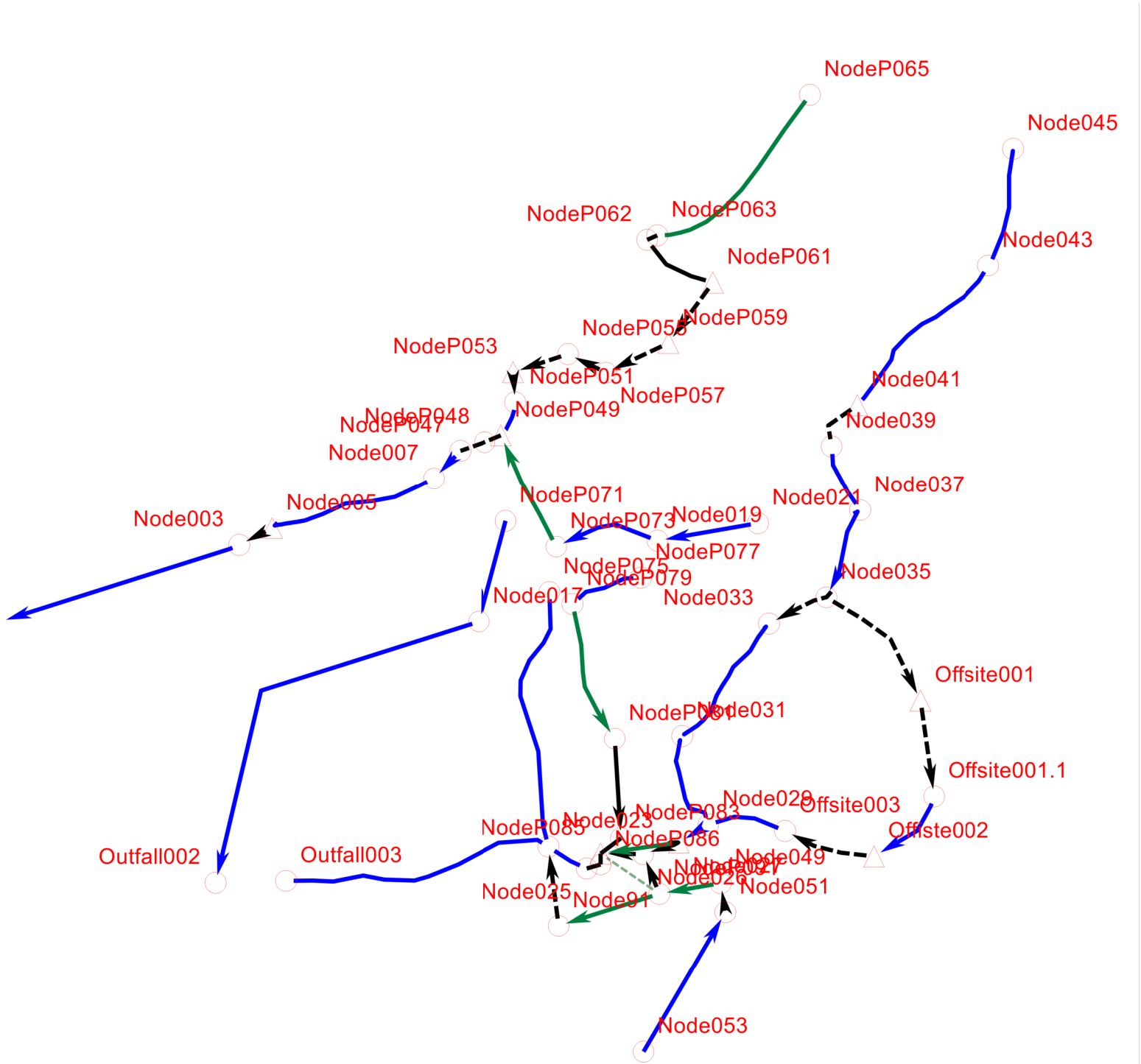


Scale 1 : 3493.87

XPS Existing Link Input

Name	Scenario	Link Name	Upstream Node Name	Downstream Node Name	Shape	Length ft	Diameter (Height) ft	Max Velocity ft/s	Max Flow cfs
Weir Link005	10-YR 24-HR	Link005	Node005	Node003				0	0.112
Weir Link041	10-YR 24-HR	Link041	Node041	Node039				0	0
Link039	10-YR 24-HR	Link039	Node039	Node037	Natural	160.377	2	0	0
Link037	10-YR 24-HR	Link037	Node037	Node035	Natural	204.927	2	0.7	2.544
Link017	10-YR 24-HR	Link017	Node017	Outfall002	Natural	935.4	2	1.51	3.014
Link007	10-YR 24-HR	Link007	Node007	Node005	Natural	374.899	6	0.86	17.685
Link023	10-YR 24-HR	Link023	Node023	Outfall003	Natural	599.974	3	0.22	9.837
Link029	10-YR 24-HR	Link029	Node029	Node027	Natural	75.635	2	1.5	8.398
Link031	10-YR 24-HR	Link031	Node031	Node029	Natural	222.751	3	2.21	8.395
Link033	10-YR 24-HR	Link033	Node033	Node031	Natural	312.606	2	2.43	8.398
Link043	10-YR 24-HR	Link043	Node043	Node041	Natural	421.435	4	0.57	15.066
Link045	10-YR 24-HR	Link045	Node045	Node043	Natural	264.164	3	3.15	15.138
Link019	10-YR 24-HR	Link019	Node019	Node017	Natural	473.67	2	1.57	3.052
264.1	10-YR 24-HR	Link027	Node027	Node026	Circular	65.2	1	4.87	3.861
Overland_Li	10-YR 24-HR	Link027	Node027	Node026	Natural	65.23	1	1.55	4.857
Link025	10-YR 24-HR	Link025	Node025	Node023	Natural	102.804	2	3.47	10.281
Link009	10-YR 24-HR	Link009	Node009	Node007	Natural	157.435	2	2.38	17.759
Link011	10-YR 24-HR	Link011	Node011	Node009	Natural	236.835	2	1.04	17.772
Link013	10-YR 24-HR	Link013	Node013	Node011	Natural	185.194	2	4.01	17.789
Link015	10-YR 24-HR	Link015	Node015	Node013	Natural	200.107	2	4.54	17.789
Link021	10-YR 24-HR	Link021	Node021	Node019	Natural	217.21	2	1.78	3.043
Weir Offsite(	10-YR 24-HR	Offsite_Link(	Node035	Offsite001				0	2.544
Weir Link035	10-YR 24-HR	Link035	Node035	Node033				0	0
Weir Offsite(	10-YR 24-HR	Offsite_Link(	Offsite001	Offsite001.1				0	2.348
Weir Offsite(	10-YR 24-HR	Offsite_Link(	Offiste002	Offsite003				0	0
Offsite_Link(	10-YR 24-HR	Offsite_Link(	Offsite003	Node029	Natural	175.62	3	0	0
Offsite_Link(	10-YR 24-HR	Offsite_Link(	Offsite001.1	Offiste002	Natural	276.34	4	0.24	1.701
Link003	10-YR 24-HR	Link003	Node003	Outfall001	Natural	470.7	2	3.01	0.112
Link051	10-YR 24-HR	Link051	Node051	Node049	Circular	72.62	1.06	6.93	2.009
Link049	10-YR 24-HR	Link049	Node049	Node047	Natural	94.99	1	0.58	2.008
Pipe Link 02(	10-YR 24-HR	Link026	Node026	Node025	Circular	133.16	1	6.51	4.852
Overland_Li	10-YR 24-HR	Link026	Node026	Node025	Natural	133.16	1	1.72	5.427
Link053	10-YR 24-HR	Link053	Node053	Node051	Natural	331.95	2	1.68	2.009
300.1	10-YR 24-HR	Link047	Node047	Node026	Circular	59.64	0.707	3.3	1.312
Overland047	10-YR 24-HR	Link047	Node047	Node026	Natural	59.64	1	0.51	0.692

XPS Proposed Model Plan View



Scale 1 : 3693.17

XPS Proposed Link Input

Name	Link Name	Upstream Node Name	Downstream Node Name	Shape	Length ft	Diameter (Height) ft	Max Velocity ft/s	Max Flow cfs	Design Full Flow cfs
Weir Link005	Link005	Node005	Node003				0	10.5	0
Weir Link041	Link041	Node041	Node039				0	10.636	0
Link039	Link039	Node039	Node037	Natural	160.377	2	1.16	10.584	363.78
Link037	Link037	Node037	Node035	Natural	204.927	2	1.27	12.982	538.82
Link017	Link017	Node017	Outfall002	Natural	935.4	2	1.34	2.052	1429.26
Link007	Link007	Node007	Node005	Natural	374.899	6	0.24	17.592	14669.86
Link023	Link023	Node023	Outfall003	Natural	599.974	3	0.36	16.674	1428.75
Link029	Link029	Node029	Node027	Natural	75.635	2	1.49	7.589	486.06
Link031	Link031	Node031	Node029	Natural	222.751	3	2.14	7.364	1223.17
Link033	Link033	Node033	Node031	Natural	312.606	2	2.35	7.368	827.28
Link043	Link043	Node043	Node041	Natural	421.435	4	0.45	28.856	4545.76
Link045	Link045	Node045	Node043	Natural	264.164	3	3.74	28.965	4170.09
LinkP019	LinkP019	Node019	NodeP073	Natural	237.871	2	0.68	4.689	1334.24
Link027	Link027	Node027	Node026	Circular	65.2	1	6.25	4.937	3.2
Overland027	Overland027	Node027	NodeP085	Trapezoidal	72	1	0	0	74.79
Link025	Link025	Node025	Node023	Natural	102.804	2	3.68	13.402	1266.26
Link021	Link021	Node021	Node019	Natural	217.21	2	1.98	4.694	265.37
Weir Offsite(	Offsite_Link(	Node035	Offsite001				0	12.981	0
Weir Link035	Link035	Node035	Node033				0	0	0
Weir Offsite(	Offsite_Link(	Offsite001	Offsite001.1				0	22.348	0
Weir Offsite(	Offsite_Link(	Offiste002	Offsite003				0	0	0
Offsite_Link(	Offsite_Link(	Offsite003	Node029	Natural	175.62	3	0	0	852.77
Offsite_Link(	Offsite_Link(	Offsite001.1	Offiste002	Natural	276.34	4	0.54	18.021	125.31
Link003	Link003	Node003	Outfall001	Natural	470.7	2	0.58	10.44	1304.27
Link051	Link051	Node051	Node049	Circular	72.62	1.06	8.08	3.82	8.67
Link049	Link049	Node049	NodeP091	Trapezoidal	94.99	1.3	1.52	3.813	13.33
LinkP026	LinkP026	Node026	NodeP085	Circular	99.605	1.5	5.37	6.887	19.13
Link053	Link053	Node053	Node051	Natural	331.95	2	2.1	3.82	794.85
LinkP065	LinkP065	NodeP065	NodeP063	Trapezoidal	470.829	2.5	6.96	29.809	235.06
LinkP063	LinkP063	NodeP063	NodeP062	Circular	25	1.5	16.25	28.862	32.82
329.1	LinkP061	NodeP061	NodeP059	Circular	179.348	1	17.63	12.944	13.99
Overland061	LinkP061	NodeP061	NodeP059	Trapezoidal	179.348	1	3	15.399	287
LinkP057	LinkP057	NodeP057	NodeP055	Circular	92.648	1	10.25	8.47	4.54
326.1	LinkP055	NodeP055	NodeP053	Circular	126.894	1	9.16	7.281	7.75
Overland055	LinkP055	NodeP055	NodeP053	Trapezoidal	126.894	1	0.96	1.191	207.97
325.1	LinkP053	NodeP053	NodeP051	Circular	65.753	1	4.41	3.209	4.17
OverlandP05	LinkP053	NodeP053	NodeP051	Trapezoidal	65.753	1	1.26	5.252	113.27
LinkP051	LinkP051	NodeP051	NodeP049	Natural	77.868	2	0.53	8.46	738.6
LinkP047	LinkP047	NodeP047	Node007	Natural	83.557	3	2.1	17.658	3506.86
South Basin '	LinkP085	NodeP085	NodeP086				0	13.581	0
South Emerg	LinkP085	NodeP085	NodeP086				0	0	0
South Basin (	LinkP085	NodeP085	NodeP086				9.29	1.332	0.43
North Basin '	LinkP049	NodeP049	NodeP048				0	3.683	0
Spillway049.	LinkP049	NodeP049	NodeP048				0	7.95	0
North Basin (	LinkP049	NodeP049	NodeP048				16.6	0.42	0.07
LinkP073	LinkP073	NodeP073	NodeP049	Trapezoidal	271.258	2	0.44	4.644	38.38
LinkP071	LinkP071	NodeP071	Node017	Natural	229.097	2	0.98	2.141	147.19
LinkP083	LinkP083	NodeP083	NodeP085	Circular	56.078	2	11.86	10.975	64.66
LinkP091	LinkP091	NodeP091	Node026	Circular	76.199	0.707	6.1	2.459	0.77
Link63	Link63	NodeP091	Node91	Trapezoidal	220	1.3	0.88	1.335	16.71
LinkP077	LinkP077	NodeP077	NodeP079	Natural	164.423	2	3.26	11.037	1151.11
LinkP079	LinkP079	NodeP079	NodeP081	Trapezoidal	312.621	2.5	2.6	10.95	63.87
LinkP081	LinkP081	NodeP081	NodeP083	Circular	216.571	2	6.78	10.979	24.57
LinkP075	LinkP075	NodeP075	Node023	Natural	581.943	2	0.6	2.799	206.5
LinkP062	LinkP062	NodeP062	NodeP061	Circular	177.6	1.5	17.76	28.523	31.45
LinkP086	LinkP086	NodeP086	Node025	Circular	37.763	1.5	8.04	13.402	6.63
323.1	LinkP048	NodeP048	NodeP047	Circular	93.73	1	6.97	5.163	6.38
OverlandP04	LinkP048	NodeP048	NodeP047	Trapezoidal	93.73	1	0.75	4.846	549.52
Overland64	Link64	Node91	Node023				0	1.328	0
328.1	LinkP059	NodeP059	NodeP057	Circular	141.113	1	7.07	5.314	5.98
OverlandP05	LinkP059	NodeP059	NodeP057	Trapezoidal	141.113	1	1.33	15.688	52.16

Hydraulic Model Node Results					
XPSWMM Node	Ground Elevation, fet NGVD29	Invert Elevation, NGVD29	10-Year, 24 Hour Water Surface Elevation, feet NGVD29	100-Year, 24 Hour Water Surface Elevation, feet NGVD29	100-Year Flood Depth[(a)]
Pre-Project Conditions					
Node003	720.0	718.0	718.0	718.3	-1.7
Node005	720.0	707.0	719.2	719.3	-0.7
Node007	739.0	733.0	733.3	733.4	-5.6
Node009	744.0	740.0	741.7	741.8	-2.2
Node011	756.0	754.0	754.3	754.4	-1.6
Node013	773.0	771.0	771.5	771.6	-1.4
Node015	814.0	812.0	812.2	812.3	-1.7
Node017	737.0	735.0	735.1	735.2	-1.8
Node019	761.0	759.0	759.1	759.2	-1.8
Node021	780.0	778.0	778.2	778.2	-1.8
Node023	717.0	714.0	714.5	714.6	-2.4
Node025	729.0	725.8	726.3	726.4	-2.6
Node026	732.0	730.9	732.4	732.6	0.6
Node027	734.0	730.2	733.4	733.5	-0.5
Node029	737.0	734.0	734.4	734.5	-2.5
Node031	744.0	740.0	740.4	740.5	-3.5
Node033	759.0	757.0	757.3	757.4	-1.6
Node035	760.0	758.0	758.1	758.4	-1.6
Node037	762.0	760.0	760.2	760.4	-1.6
Node039	765.0	761.0	761.0	761.5	-3.5
Node041	764.0	756.0	763.0	763.5	-0.5
Node043	777.0	773.0	773.3	773.4	-3.6
Node045	799.0	796.0	796.3	796.4	-2.6
Node047	733.0	731.0	733.1	733.2	0.2
Node049	742.0	735.8	736.0	736.0	-6.0
Node051	743.0	740.0	740.4	740.6	-2.4
Node053	783.0	781.0	781.1	781.2	-1.8
Offiste002	747.0	742.0	743.4	745.5	-1.5
Offsite001	747.0	741.0	745.1	745.5	-1.5
Offsite001.1	747.0	743.0	743.4	745.5	-1.5
Offsite003	745.0	740.0	740.0	740.0	-5.0
Outfall001	701.4	697.4	699.5	699.4	-2.0
Outfall002	688.0	685.0	685.1	685.2	-2.8
Outfall003	694.0	687.0	694.0	694.0	0.0
Post-Project Conditions					
Node003	720.0	718.0	718.1	718.3	-1.7
Node005	720.0	707.0	719.2	719.3	-0.7
Node007	739.0	733.0	733.2	733.3	-5.7
Node017	737.0	735.0	735.1	735.1	-1.9
Node019	761.0	759.0	759.1	759.2	-1.8
Node021	780.0	778.0	778.2	778.2	-1.8
Node023	717.0	714.0	714.5	714.6	-2.4
Node025	732.0	725.8	726.3	726.3	-5.7
Node026	736.0	730.9	731.7	731.9	-4.1
Node027	735.5	730.2	732.8	733.7	-1.8
Node029	737.0	734.0	734.3	734.4	-2.6
Node031	744.0	740.0	740.3	740.4	-3.6
Node033	759.0	757.0	757.2	757.3	-1.7
Node035	760.0	758.0	758.1	758.3	-1.7
Node037	762.0	760.0	760.2	760.3	-1.7
Node039	765.0	761.0	761.0	761.4	-3.6
Node041	764.0	756.0	762.7	763.5	-0.5
Node043	777.0	773.0	773.3	773.4	-3.6
Node045	799.0	796.0	796.2	796.3	-2.7
Node049	738.0	735.8	736.4	736.6	-1.4
Node051	743.0	740.0	740.4	740.5	-2.5
Node053	783.0	781.0	781.1	781.2	-1.8
Node91	733.0	730.7	730.7	732.1	-0.9
NodeP047	744.0	736.0	736.2	736.3	-7.7
NodeP048	746.0	740.0	745.0	745.1	-0.9
NodeP049	745.0	740.0	745.0	745.1	0.1
NodeP051	751.0	747.0	747.2	747.3	-3.7
NodeP053	751.0	748.0	750.0	750.2	-0.8
NodeP055	760.0	756.0	759.0	759.0	-1.0
NodeP057	768.0	758.0	760.5	768.0	0.0
NodeP059	792.0	763.0	766.2	768.0	-24.0
NodeP061	803.5	799.5	801.4	802.7	-0.8
NodeP062	823.0	821.2	822.0	823.0	0.0
NodeP063	828.0	825.1	826.0	828.0	0.0
NodeP065	923.0	920.0	920.7	921.0	-2.0
NodeP071	743.0	741.0	741.1	741.1	-1.9
NodeP073	746.2	744.0	745.0	745.1	-1.1
NodeP075	746.2	744.0	744.1	744.1	-2.1

Hydraulic Model Node Results					
XPSWMM Node	Ground Elevation, fet NGVD29	Invert Elevation, NGVD29	10-Year, 24 Hour Water Surface Elevation, feet NGVD29	100-Year, 24 Hour Water Surface Elevation, feet NGVD29	100-Year Flood Depth[(a)]
Post-Project Conditions					
NodeP077	761.0	758.0	758.2	758.2	-2.8
NodeP079	746.0	743.0	744.0	744.2	-1.8
NodeP081	738.5	736.0	736.8	737.1	-1.4
NodeP083	735.1	732.6	733.0	733.3	-1.8
NodeP085	735.0	726.0	730.6	731.0	-4.0
NodeP086	732.0	726.0	728.3	730.9	-1.1
NodeP091	736.0	731.2	733.8	735.1	-0.9
Offiste002	747.0	742.0	743.4	745.3	-1.7
Offsite001	747.0	741.0	745.1	745.3	-1.7
Offsite001.1	747.0	743.0	743.4	745.3	-1.7
Offsite003	745.0	740.0	740.0	740.0	-5.0
Outfall001	701.4	697.4	699.4	699.4	-2.0
Outfall002	688.0	685.0	685.1	685.1	-2.9
Outfall003	694.0	687.0	694.0	694.0	0.0

(a) Negative flood depth indicates freeboard, positive flood depth indicates flooding.

Hydraulic Model Link Results						
			10-Year, 24 Hour Storm Event		100-Year, 24 Hour Storm Event	
XPSWMM Link	Link Type	Link Height / Diameter, feet	Flowrate, cfs	Flow Velocity, ft/s	Flowrate, cfs	Flow Velocity, ft/s
Pre-Project Conditions						
Link003	Natural	2.0	0.1	3.0	10.7	0.6
Link005	Weir	-	0.1	0.0	11.1	0.0
Link007	Natural	6.0	17.7	0.9	33.3	0.9
Link009	Natural	2.0	17.8	2.4	33.5	2.9
Link011	Natural	2.0	17.8	1.0	33.5	1.6
Link013	Natural	2.0	17.8	4.0	33.5	4.9
Link015	Natural	2.0	17.8	4.5	33.5	5.6
Link017	Natural	2.0	3.0	1.5	5.7	1.9
Link019	Natural	2.0	3.1	1.6	5.8	1.9
Link021	Natural	2.0	3.0	1.8	5.8	2.2
Link023	Natural	3.0	9.8	0.2	18.7	0.4
Link025	Natural	2.0	10.3	3.5	19.3	4.2
Link026	Natural	1.0	5.4	1.7	14.1	1.8
Link026	Circular	1.0	4.9	6.5	5.3	7.0
Link027	Circular	1.0	3.9	4.9	3.8	-6.3
Link027	Natural	1.0	4.9	1.6	12.3	1.5
Link029	Natural	2.0	8.4	1.5	15.8	1.8
Link031	Natural	3.0	8.4	2.2	15.8	2.6
Link033	Natural	2.0	8.4	2.4	15.8	2.8
Link035	Weir	-	0.0	0.0	0.0	0.0
Link037	Natural	2.0	2.5	0.7	17.2	1.4
Link039	Natural	2.0	0.0	0.0	14.3	1.3
Link041	Weir	-	0.0	0.0	14.3	0.0
Link043	Natural	4.0	15.1	0.6	31.5	0.5
Link045	Natural	3.0	15.1	3.2	31.7	3.8
Link047	Circular	0.7	1.3	3.3	1.3	3.3
Link047	Natural	0.7	0.7	0.5	2.6	0.8
Link049	Natural	1.0	2.0	0.6	3.8	0.8
Link051	Circular	1.1	2.0	6.9	3.8	20.9
Link053	Natural	2.0	2.0	1.7	3.8	2.0
Offsite_Link001	Weir	-	2.5	0.0	17.2	0.0
Offsite_Link001.1	Weir	-	2.3	0.0	28.4	0.0
Offsite_Link002	Natural	4.0	1.7	0.2	23.5	0.5
Offsite_Link003	Weir	-	0.0	0.0	0.0	0.0
Offsite_Link004	Natural	3.0	0.0	0.0	0.0	0.0
Post-Project Conditions						
Link003	Natural	2.0	0.4	0.0	10.4	0.6
Link005	Weir	-	0.4	0.0	10.5	0.0
Link007	Natural	6.0	7.3	0.2	17.6	0.2
Link017	Natural	2.0	1.1	1.6	2.1	1.3
Link021	Natural	2.0	2.5	1.7	4.7	2.0
Link023	Natural	3.0	8.9	0.2	16.7	0.4
Link025	Natural	2.0	8.4	3.3	13.4	3.7
Link027	Circular	1.0	3.6	4.7	4.9	6.3
Link029	Natural	2.0	3.9	1.2	7.6	1.5
Link031	Natural	3.0	3.9	1.8	7.4	2.1
Link033	Natural	2.0	3.9	2.0	7.4	2.4
Link035	Weir	-	0.0	0.0	0.0	0.0
Link037	Natural	2.0	2.5	0.7	13.0	1.3
Link039	Natural	2.0	0.0	0.0	10.6	1.2
Link041	Weir	-	0.0	0.0	10.6	0.0
Link043	Natural	4.0	13.8	0.6	28.9	0.5
Link045	Natural	3.0	13.9	3.1	29.0	3.7
Link049	Trapezoidal	1.3	2.0	1.2	3.8	1.5
Link051	Circular	1.1	2.0	7.1	3.8	8.1
Link053	Natural	2.0	2.0	1.8	3.8	2.1
Link63	Trapezoidal	1.3	0.0	0.0	1.3	0.9
Link64	Weir	-	0.0	0.0	1.3	0.0
LinkP019	Natural	2.0	2.5	1.0	4.7	0.7
LinkP026	Circular	1.5	5.3	5.8	6.9	5.4
LinkP047	Natural	3.0	7.4	1.6	17.7	2.1
LinkP048	Circular	1.0	4.2	5.8	5.2	7.0
LinkP048	Trapezoidal	1.0	0.1	0.2	4.8	0.8
LinkP049	Orifice	-	0.3	10.6	0.4	16.6
LinkP049	Weir	-	3.8	0.0	3.7	0.0
LinkP049	Weir	-	2.6	0.0	8.0	0.0
LinkP051	Natural	2.0	5.9	0.5	8.5	0.5
LinkP053	Circular	1.0	5.9	3.6	3.2	4.4
LinkP053	Trapezoidal	1.0	0.0	0.0	5.3	1.3
LinkP055	Circular	1.0	7.5	9.4	7.3	9.2
LinkP055	Trapezoidal	1.0	1.2	1.3	1.2	1.0
LinkP057	Circular	1.0	8.8	6.1	8.5	10.3
LinkP059	Circular	1.0	6.3	8.0	5.3	7.1

Hydraulic Model Link Results						
			10-Year, 24 Hour Storm Event		100-Year, 24 Hour Storm Event	
XPSWMM Link	Link Type	Link Height / Diameter, feet	Flowrate, cfs	Flow Velocity, ft/s	Flowrate, cfs	Flow Velocity, ft/s
Post-Project Conditions						
LinkP059	Trapezoidal	1.0	3.1	0.7	15.7	1.3
LinkP061	Circular	1.0	13.1	17.8	12.9	17.6
LinkP061	Trapezoidal	1.0	0.0	0.0	15.4	3.0
LinkP062	Circular	1.5	16.0	16.6	28.5	17.8
LinkP063	Circular	1.5	16.0	21.1	28.9	16.3
LinkP065	Trapezoidal	2.5	16.0	6.4	29.8	7.0
LinkP071	Natural	2.0	1.1	0.8	2.1	1.0
LinkP073	Trapezoidal	2.0	2.5	0.4	4.6	0.4
LinkP075	Natural	2.0	1.5	0.8	2.8	0.6
LinkP077	Natural	2.0	5.9	2.7	11.0	3.3
LinkP079	Trapezoidal	2.5	5.8	2.2	11.0	2.6
LinkP081	Circular	2.0	5.8	7.5	11.0	6.8
LinkP083	Circular	2.0	5.8	8.0	11.0	11.9
LinkP085	Weir	-	1.3	9.3	1.3	9.3
LinkP085	Weir	-	7.5	0.0	13.6	0.0
LinkP085	Weir	-	0.0	0.0	0.0	0.0
LinkP086	Circular	1.5	8.4	5.1	13.4	8.0
LinkP091	Circular	0.7	2.0	5.0	2.5	6.1
Offsite_Link001	Weir	-	2.5	0.0	13.0	0.0
Offsite_Link001.1	Weir	-	2.3	0.0	22.3	0.0
Offsite_Link002	Natural	4.0	1.7	0.2	18.0	0.5
Offsite_Link003	Weir	-	0.0	0.0	0.0	0.0
Offsite_Link004	Natural	3.0	0.0	0.0	0.0	0.0
Overland027	Trapezoidal	1.0	0.0	0.0	0.0	0.0

Yellow highlighted rows indicate overland flow links.

Appendix C

Storm Water Quality Template

Post-Construction
Storm Water Quality Plan

For:

Project 8
Placer County

Prepared by:

MacKay & Somps Civil Engineering, Inc.
1025 Creekside Ridge Dr., Ste 150
Roseville, CA 95678
916-773-1189

Preparation Date: March 2022

Approval Date:_____

Section 1 General Project Information

The undersigned owner of the subject property, is responsible for the implementation of the provisions of this plan, including ongoing operations and maintenance (O&M), consistent with the requirements of the West Placer Storm Water Quality Design Manual and the State of California Phase II Small MS4 General Permit (Order No: 2013-0001-DWQ). If the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement the SWQP.

For all Regulated Projects (As identified in Form 1-2 below), the undersigned owner hereby grants access to all representatives of the Jurisdictional Agency for the sole purpose of performing O&M inspections of the installed treatment system(s) and hydromodification control(s) if any.

A copy of the final signed and fully approved SWQP shall be available on the subject site for the duration of construction and then stored with the project approval documentation and improvement plans in perpetuity.

Form 1-1 Project Identification and Owner's Certification

Project Site Address:	7615 Callison Road, Penryn, CA 95663	
Owner Name:	Michel Fournier	
Title		
Company	Building Engineering & Maintenance, Inc.	
Address	1025 Creekside Ridge Dr., Ste 100	
City, State, Zip Code	Roseville, CA 95678	
Email		
Telephone #	916-316-8617	
Signature	Date	
Engineer:*	Steve Smith	PE Stamp* (Required for all Regulated Projects)
Title	Project Manager	
Company	MacKay & Somps Civil Engineering, Inc.	
Address	1025 Creekside Ridge Dr., Ste 150	
City, State, Zip Code	Roseville, CA 95678	
Email	ssmith@msce.com	
Telephone #	916-773-1189	
Signature		
Brief Description of Project: (Attach additional sheets as necessary)	+/- 47 Acre winery project	

* Not required for Small Projects as determined in Form 1-2 below. Project owners are responsible for ensuring that all storm water facilities are designed by an appropriately licensed and qualified professional.

Form 1-2 Project Category	
Development Category (Select all that apply)	
[1]**Small Project** – All projects, except LUPs, that create and/or replace between 2,500-5,000 ft^2 of impervious surface or detached single family homes that create and/or replace 2,500 ft^2 or more of impervious surface and are not part of a larger plan of development.	
[2]Enter total new and/or replaced impervious surface (ft^2)	
[3]**Regulated Project** – All projects that create and/or replace 5,000 ft^2 or more of impervious surface.	X
[4]**Regulated Redevelopment Project** with equal to, or greater than 50 percent increase in impervious area	
[5]**Regulated Redevelopment Project** with less than 50 percent increase in impervious area	
[6]Enter total pre-project impervious surface (ft^2)	308
[7]Enter total new and/or replaced impervious surface (ft^2)	229,400
[8]**Regulated Road or linear underground/overhead project (LUP)** creating 5,000 ft^2 or more of newly constructed contiguous impervious surface.	
[9]Enter total new and/or replaced impervious surface (ft^2)	
[10]**Regulated Hydromodification Management Project** – Regulated projects that create and/or replace 1 acre or more of impervious surface. A project that does not increase impervious surface area over the pre-project condition is not a hydromodification management project.	X
[11]Enter total new and/or replaced impervious surface (ft^2)	229,400

Section 3 Regulated Projects

Section 3 forms are to be completed for all Regulated Projects.

Form 3-1 Site Location and Hydrologic Features

Site coordinates: *Take GPS measurement at approximate center of site*	[1] Latitude	[2] Longitude	[3] Elevation (ft. above sea level)	[4] 85th Percentile, 24 Hour Design Storm Depth (in):
	38°52'07"N	121°09'38"W	820	1.0

[5] Receiving waters *Name of stream, lake or other downstream waterbody to which the site runoff eventually drains*	Sacramento River via Pleasant Grove Creek South Branch and tributary
[6] 303(d) listed pollutants of concern *Refer to State Water Resources Control Board website* www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/#impaired	Dry Creek is listed for Indicator Bacteria of unknown sources.
[7] Is Project going to be phased? *If yes, ensure that the SWQP evaluates each phase with distinct DMAs, requiring LID BMPs to address runoff at time of completion*	Yes

[8] *Use this form to show a conceptual schematic depicting DMAs and conveyance features connecting DMAs to the site outlet(s). An example is provided below that can be modified for the proposed project or a drawing clearly showing DMAs and flow routing may be attached.*

Example only
Modify for project specific SWQP
Use separate sheet if necessary

See Exhibits

Form 3-2 Site Assessment and Layout Documentation

	Has this Item been considered in the Site Layout and depicted in the Site Plan?	
	Yes	**Not Applicable (Include brief explanation)**
Define the development envelope and protected areas, identifying areas that are most suitable for development areas to be left undisturbed.	X	Development envelop considers natural features on the site
Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.		N/A, Development of the site is minimal. Site contains both Type B and Type D soils.
Limit overall impervious coverage of the site with paving and roofs.		N/A, conforming to local impervious coverage ordinances
Set back development from creeks, wetlands, and riparian habitats.		N/A, site is not adjacent to creeks, wetlands, nor riparian habits
Preserve significant trees.	X	Site has previously been disturbed and vineyards will remain in place
Conform site layout along natural landforms.	X	
Avoid excessive grading and disturbance of vegetation and soils.		N/A, site has previously been disturbed
Replicate the site's natural drainage patterns.	X	
Detain and retain runoff throughout the site.	X	

Attach a Site Plan that incorporates the applicable considerations above. Ensure that the following items are included in the Site Plan:

Site Boundary
Soil types and areal extents, test pit and infiltration test locations
Topographic data with 1 ft. contours
Existing natural hydrologic features (depressions, watercourses, wetlands, riparian corridors)
Environmentally sensitive areas and areas to be preserved.
Proposed locations and footprints of improvements creating new, or replaced, impervious surfaces
Potential pollutant sources and locations
Entire site divided into separate DMAs with unique identifiers
Existing and proposed site drainage network with flow directions and site run-on and discharge locations
Proposed design features and surface treatments used to minimize imperviousness and reduce runoff
Proposed locations and footprints of treatment and hydromodification management facilities
Design features for managing authorized non-stormwater discharges
Areas of soil and/or groundwater contamination
Existing utilities and easements
Maintenance areas

Form 3-3 Source Control Measures

Potential Pollutant Generating Activity or Source	Check One		Describe the source control measures to be implemented for each potential pollutant generating activity or source present on the project as listed in Appendix C and in the CASQA Fact Sheets. Include any special features, materials, or methods of construction that will be used.
	Present	Not Applicable	
Accidental spills or leaks	☑	☐	All materials will be stored inside and properly sealed.
Interior floor drains	☑	☐	Floor drains connect to sanitary sewer.
Parking/storage areas and maintenance	☑	☐	Parking lots to be swept monthly or as needed.
Indoor and structural pest control	☑	☐	All materials will be stored inside and properly sealed.
Pools, spas, ponds, decorative fountains, and other water features	☑	☐	All water features will be maintained per their O&Ms.
Landscape/outdoor pesticide use	☑	☐	All manufacturer recommendations and regulations will be followed. Minimum amounts will be used.
Restaurants, grocery stores, and other food service operations	☑	☐	Floor drains connect to sanitary sewer. Trash bins will be covered.
Refuse areas	☑	☐	Trash bins to be closed and locked.
Industrial Processes	☑	☐	Winery operation. Floor drains will discharge to sanitary sewer.
Outdoor storage of equipment or materials	☑	☐	All material storage areas are covered with secondary containment.
Vehicle and equipment cleaning	☐	☑	
Vehicle and equipment repair and maintenance	☐	☑	
Fuel dispensing areas	☐	☑	
Loading docks	☑	☐	No drainage to storm drainage system.
Fire sprinkler test water	☑	☐	To be disposed in sanitary sewer.
Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources	☑	☐	To be disposed in sanitary sewer.
Unauthorized non-storm water discharges	☐	☑	
Building and grounds maintenance	☑	☐	Landscape maintenance to use minimal fertilizers.

The source control measures identified in this table shall be designed consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment[1], or from another equivalent manual.

[1] California Stormwater BMP Handbook New Development and Redevelopment. California Stormwater Quality Association (CASQA). January 2003.

Form 3-4 Runoff Reduction Calculator for Site Design Measures on Regulated Projects

[1]DMA ID No.			CP2		CP3		CP4	
Site Design Measure	**Runoff Reduction Parameters**			**Runoff Reduction (ft3)**		**Runoff Reduction (ft3)**		**Runoff Reduction (ft3)**
[2] Adjacent/On-Site Stream Setbacks and Buffers	A_{imp} (ft^2)	*impervious drainage area*	-	-	-	-	-	-
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.9		0.9		0.9	
[3] Soil Quality Improvement and Maintenance	A_{pond} (ft^2)	*ponding area*	0	-	0	-	0	-
	D_{pond} (ft)	*ponding depth*						
	A_{sa} (ft^2)	*soil amendment area*	0		0		0	
	D_{sa} (ft)	*depth of amended soil*	1.0		1.0		1.0	
	n	*porosity of amended soil*	0.35		0.35		0.35	
[4] Tree Planting and Preservation	n_e	*number of new evergreen trees*	0	17,912.4	0	1,199.0	0	9,969.2
	n_d	*number of new deciduous trees*	0		0		0	
	A_{tc} (ft^2)	*canopy area of existing trees to remain on the property*	238832		15987		132923	
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.9		0.9		0.9	
[5] Rooftop and Impervious Area Disconnection	A_{imp} (ft^2)	*impervious drainage area*	10,515	788.6	3,955	296.6	26,905	2,017.9
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.9		0.9		0.9	
[6] Porous Pavement	A_{res} (ft^2)	*area of gravel storage layer*		-	0	-		-
	D_{res} (ft)	*depth of gravel storage layer*						
	n_{agg}	*porosity of aggregate*						
	C	*efficiency factor*						
[7] Vegetated Swales	A_{imp} (ft^2)	*impervious drainage area*		-		-		-
	V_{85} (in)	*runoff volume from 85th percentile, 24-hour storm*	0.9		0.9		0.9	
[8] Rain Barrels and Cisterns	N	*number of rain barrels and/or cisterns*		-	0	-	0	-
	V_a (ft^3)	*volume of each rain barrel and/or cistern*						
[9] Do all Site Design Measures meet the design requirements outlined in the Fact Sheets?					Yes	X	No	
[10] Total Volume Reduction (ft^3)				**18,701**		**1,496**		**11,987**
[11] Effective Treated Impervious Area (ft^2)				**249,347**		**19,942**		**159,828**

Form 3-5 Computation of Water Quality Design Criteria for Stormwater Treatment and Baseline Hydromodification Measures

DMA ID No.	CP2	CP3	CP4
[1]Total impervious area requiring treatment	69,402	3,955	156,043
[2] Impervious area untreated by Site Design Measures (ft^2) *Item 1 – Form 3-4 Item 11*	-	-	-
[3]Additional pervious area draining to BMP (ft^2)	1,885,571	150,247	735,630
[4] Composite DMA Runoff Coefficient (Rc) *Enter area weighted composite runoff coefficient representing entire DMA*	0.00	0.00	0.00
[5] Water Quality Volume (WQV) (ft^3) *WQV = 1/12 * [Item 2 + Item 3) *Item 4] * Unit WQV*	-	-	-
[6] Water Quality Flow (WQF) (cfs) *WQF = 1/43,200 * [0.2* (Item 2 + Item 3) * Item4]*	0.000	0.000	0.000

Form 3-6 Volume-Based Infiltrating Bioretention Measures				
[1]**DMA ID No.** *If combining multiple DMAs from Form 3-5, enter a new unique DMA ID No.*	**CP2**	**CP3**	**CP4**	
[2]WQV (ft^3) *Item 5 in Form 3-5* *If combining multiple DMAs from Form 3-5, enter the sum of their respective WQVs.*	0	0	0	#DIV/0!
[3]Surface Loading Rate *Maximum 5.0 in/hr*	5	5	5	5
[4]BMP Surface Area (ft^2) *Top of BMP*	0	0	0	0
[5]Infiltration rate of underlying soils (in/hr)	0.07	0.07	0.07	0.07
[6]Maximum ponding depth (ft) *BMP specific, see BMP design details*	0.3	0.3	0.3	1.0
[7]Ponding Depth (ft) d_{BMP} *= Minimum of (1/12 * Item 5 * 48 hrs) or Item 6*	0.28	0.28	0.28	0.28
[8]Infiltrating surface area, SA_{BMP} (ft^2) *Bottom of BMP*	0	0	0	
[9]Planting media depth, d_{media} (ft)	1.5	1.5	1.5	1.5
[10]Planting media porosity	0.35	0.35	0.35	0.35
[11]Gravel depth, d_{media} (ft) *Only included in certain BMP types*	3.5	3.5	3.5	3.5
[12]Gravel porosity	0.30	0.30	0.30	0.30
[13]Retention Volume (ft^3) $V_{retention}$ *= Item 8 * [Item7 + (Item 9 * Item 10) + (Item 11 * Item 12) + (1.5* (Item 5 / 12))]*	-	-	-	-
[14]Untreated Volume (ft^3) $V_{untreated}$ *= Item 2 – Item 13* *If greater than zero, adjust BMP sizing variables and re-compute retention volume*	0	0	0	#DIV/0!
[15]Treated Flow Rate (ft^3/s) $Q_{treated}$ *= 1/43,200*(Item 3 * Item 4)*	0.0000	0.0000	0.0000	0.0000
[16]Total Treated Flow Rate for Project (ft^3/s) Q_{total} *= Sum of Item 15 for all DMAs*	0.000			
[17]Is WQV for each DMA treated on-site?	**Yes**	**X**	**No**	

Section 4
Regulated Hydromodification Management Projects

Form 4-1 Peak Runoff Response Time

(Complete Section 4 forms for Regulated Hydromodification Projects only)

Determine total runoff response time for pre- and post-construction conditions at each project outlet.

Variables	Pre-construction DMAs to Project Outlet				Post-construction DMAs to Project Outlet			
	EX CP2	**EX CP3**	**EX CP4**		**DEV CP2**	**DEV CP3**	**DEV CP4**	
[1]Length of longest overland flow path *Not to exceed 100 ft*	100	100	100		100	100	50	
[2]Slope of overland flow path (ft/ft)	0.1200	0.0660	0.1500		0.1200	0.0660	0.0150	
[3]Manning's roughness coefficient for overland flow surface *See Table 5-5 of the Placer County SWMM*	0.4000	0.4000	0.4000		0.4000	0.4000	0.1100	
[4]Overland flow response time (min) $(0.355*(\text{Item 1}*\text{Item 3})^{0.6})/(\text{Item 2}^{0.3})$	6	7	6	-	6	7	3	-
[5]Hydrologic Soil Group *Refer to Section 3.1.1. or NRCS Web Soil Survey*	D	D	D		D	D	D	
[6]Current Land Cover Type(s) *Select from categories shown in Table 5-3 of the SWMM*	Woodland	Woodland	Woodland		Vineyard / pave	Vineyard / pave	Vineyard / pave	
[7]Pervious Area Condition: *Based on the extent of vegetated cover Good >75%; Fair 50-75%; Poor <50% Attach photos of site to support rating*	Good	Good	Good		Good	Good	Good	
[8]Infiltration Rate (in/hr) *Refer to Table 5-3 of the SWMM using Items 3, 4, and 5 above or obtain site specific field measurements (See Section 3.1.1)*	0.09	0.09	0.09		0.09	0.09	0.09	
[9]Length of collector flow (ft)	2,991	626	940		2,658	731	940	
[10]Cross-sectional area of collector flow facility (ft^2)	40	40	40		40	40	40	
[11]Wetted perimeter of collector flow facility (ft)	45	45	45		45	45	45	
[12]Manning's roughness of collector flow facility	0.0400	0.0400	0.0400		0.0400	0.0400	0.0400	
[13]Slope of collector flow facility (ft/ft)	0.0390	0.0660	0.0487		0.0390	0.0660	0.0487	
[14]Channel flow velocity (ft/sec) $V = (1.49 / \text{Item 12}) * (\text{Item 10}/\text{Item 11})^{\wedge 0.67} * (\text{Item 13})^{\wedge 0.5}$	6.8	8.8	7.6	-	6.8	8.8	7.6	-
[15]Collector flow facility response time (min) T_c = Item 9 /(Item 14 * 60)	7.3	1.2	2.1	-	6.5	1.4	2.1	-
[16]Total runoff response time or T_t (min) T_t = Item 4 + Item 15	13.5	8.5	7.8	-	12.6	8.7	5.5	-

Form 4-2 Hydromodification Target for Peak Runoff

Variables	Pre-construction DMAs to Project Outlet				Post-construction DMAs to Project Outlet			
	EX CP2	**EX CP3**	**EX CP4**		**DEV CP2**	**DEV CP3**	**DEV CP4**	
[1] Drainage Area (ft^2) *Sum of all outlet level DMAs should equal total project area.*	2,020,310	154,202	732,736		1,954,973	154,202	891,673	
[2] Impervious Area (ft^2) *Sum of all outlet level DMAs should equal total project impervious area.*	0	308	0		69,402	3,955	156,043	
[3] Rainfall depth for 2yr storm with duration equal to response time (in) *See Placer County SWMM Table 5-A-1 for elevation of site and duration equal to response time*	0.22	0.17	0.16		0.21	0.17	0.14	
[4] Unit peak runoff (cfs/acre) *q = 60/Form 4-1 Item 16 * Item 3*	0.98	1.20	1.23	-	1.00	1.17	1.52	-
[5] Infiltration factor (cfs/acre) F_i = *Form 4-1 Item 8 * (1 + 1 /(1.3 + 0.0005 * Form 3-1 Item 3))*	0.14	0.14	0.14	-	0.14	0.14	0.14	-
[6] Peak runoff from DMAs (cfs) Q_p = *Item 1 * Item 4 – Item 5 * (Item 1 - Item 2)*	39.18	3.77	18.46	-	38.86	3.68	28.86	-
[7] Total Pre-Project Peak Runof (ft^3/s) Q_{total} = *Sum of Item 6 for all Pre-construction DMAs*	61.41							
[8] Is the total post-project peak runoff equal to or less than the total pre-project peak runoff? *Yes, if Item 7 is greater than or equal to the sum of the Total Treated Flow Rates from Form 3-6 Item 16 and 3-7 Item 12.*	**YES**							

Form 4-3 Detention Volumes for Hydromodification Management

	Post-construction DMAs to Project Outlet			
	DEV CP2	**DEV CP3**	**DEV CP4**	
[1] Land cover and hydrologic condition *See NRCD TR-55 Manual Table 2-2 for types*	Vineyard/ Paved	Vineyard/ Paved	Vineyard/ Paved	
[2] Hydrologic Soil Group *Refer to Section 3.1.1. or NRCS Web Soil Survey*	D	D	D	-
[3] Drainage Area (A) (ft^2)	1,954,973	154,202	891,673	-
[4] Curve Number (CN) *Use Items 1 and 2 to select curve number from NRCS TR-55 Manual Table 2-2*	80	80	80	
[5] Post-development soil storage capacity, S (in): *S = (1000 / Item 4) – 10*	2.5	2.5	2.5	-
[6] Precipitation for 2-yr, 24-hr storm (in) *See Placer County SWMM Table 5-A-1 for elevation of site and 24-hr duration depths*	1.90	1.90	1.90	
[7] Post-developed runoff volume for 2-yr – 24-hour storm, V_{runoff} (ft^3): *V_{runoff} = Item 3 * (1 / 12) * [(Item 6 – 0.2 * Item 5)^2 / (Item 6 + 0.8 * Item 5)]*	81,875	6,458	37,344	-
[8] Attenuation Factor, $q_{out/in}$ (ratio of target outflow rate to peak inflow rate): *$q_{out/in}$ = Form 4-2 Item 6 Pre-Construction / Form 4-2 Item 6 Post-Construction*	1.01	1.02	0.64	-
[9] Equalization Factor, Vs/Vr (ratio of storage capacity to runoff volume) *Vs/Vr obtained using Item 8 and nomograph in Figure 6-1 of NRCS TR-55 Manual for Rainfall Type IA*	0.13	0.13	0.15	
[10] Runoff detention capacity to achieve hydromodification management criteria (ft^3) *$D_{hydromod}$ = Item 7 * Item 9*	10644	840	5602	-
[11] Site Design Measure (SDM) Volume (ft^3): *Sum of Item 10 in Form 3-4 for all SDMs in this DMA.*	18,701	1,496	11,987	
[12] Bioretention Volume (ft3): *Sum of Item 13 in Form 3-6 for all bioretention measures in this DMA.*	0	0	0	
[13] Flow-Through Detention Volume (ft3): *Sum of Item 10 in Form 3-7 for all flow-through facilities in this DMA.*	0	0	0	
[14] Supplemental Detention Volume (ft^3):	20037	0	43995	
[15] Combined Detention Volume in this DMA (ft^3): *Sum of Items 11 through 14*	38,738	1,496	55,982	-
[16] Is detention capacity to achieve hydromodification management criteria achieved at all project outlets? *Yes, if Item 10 is less than or equal to Item 15. If not provide additional storage capacity*	**Yes**	**X**	**No**	

Form 5-1 BMP Inspection and Maintenance		
BMP	**Inspection Point and Frequency**	**Maintenance Activity Required**
Trees / Vineyard	At each plant/as necessary	Irrigate to establish and maintain
	At each plant/annually	Remove fallen leaves and debris
	At each plant/regularly	Prune dead vegetation from plants
	At each plant/as needed	Minimize the use of chemical fertilizers
	At each plant/as necessary	Maintain lawn and turf at least 24-inches from trunk of plant
	At each plant/as necessary	Remove and replace dead plants

Form 6-1 Post-Construction Stormwater BMPs

Following is a summary of all BMPs included in the Project design. This checklist must be included on the cover sheet of the Improvement Plans for all Regulated Projects.

BMP		Plan Sheet Number(s)
Structural Source Controls (list BMPs)		
Site Design Measures	Stream Setbacks and Buffers	
	Soil Quality Improvement and Maintenance	
	Tree Planting and Preservation	
	Rooftop and Impervious Area Disconnection	
	Porous Pavement	
	Vegetated Swales	
	Rain Barrels and Cisterns	
Stormwater Treatment and Baseline Hydromodification Measures	Bioretention with Infiltration	
	Flow-Through Planters, Tree Box Filters and Media Filters	
Hydromodification Management Measures	Supplemental Detention	**Conceptual Grading Plans Sheets 1 and 2**



N

0 150 300 600

SCALE: 1"=300'

LEGEND

- PROJECT SITE BOUNDARY
- PROPERTY BOUNDARY
- DMA BOUNDARY
- EXISTING VINEYARD CANOPY
- DISCONNECTED IMPERVIOUS AREA
- DMA CP2 44.9±ac — DMA NAME & AREA

Storm Water Quality Exhibit
Drainage Management Areas

Project 8

Placer County
Scale 1"=300'
Datum: NGVD29

MACKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

California
March 2022
18511

PRELIMINARY - Subject to Revision

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APPENDIX N

Public Well Impact Evaluation
Project 8 Winery
7615 Callison Road
Penryn, Placer County, California

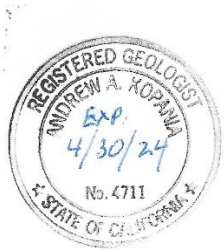
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June 25, 2022



Dr. Andrew A. Kopania
California Professional Geologist #4711
California Certified Hydrogeologist #HG31

Public Well Impact Evaluation
Project 8 Winery
7615 Callison Road
Penryn, Placer County, California

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Public Well Impact Evaluation
Project 8 Winery
7615 Callison Road
Penryn, Placer County, California

1.0 Introduction

This Public Well Impact Evaluation was prepared on behalf of Building Engineering and Maintenance, Inc. of Roseville, California (BEM). The purpose of this evaluation is to assess the potential for groundwater pumping related to BEM's proposed Project 8 Winery in Penryn, California (the "project") to affect other groundwater users in the project vicinity. Figure 1 provides a Project Vicinity Map. Figure 2 shows the project area and local features.

This evaluation was prepared to specifically address the following comment from Placer County to BEM:

> *"Public Water System – provide evidence that use of on-site public well for project operations will not have adverse effect to wells of neighboring property owners."*

Water for the project will be provided by an on-site groundwater supply well referred to as Well 20-2 and also as the "Public Well" for the project. The Public Well will provide water for potable and sanitary needs as well as for winery operations. Water requirements for fire suppression and for vineyard irrigation will be provided from the Placer County Water Agency's Antelope Canal and, therefore, will not affect groundwater in the project area. The Antelope Canal is shown on Figure 2. Use of canal water for fire suppression and irrigation is not considered further in this report.

This report includes a summary of background information that was considered and relied upon for this evaluation, the results of well production tests that have been conducted in two wells, a technical evaluation of the potential effects of pumping the Public Well for project water needs, and conclusions.

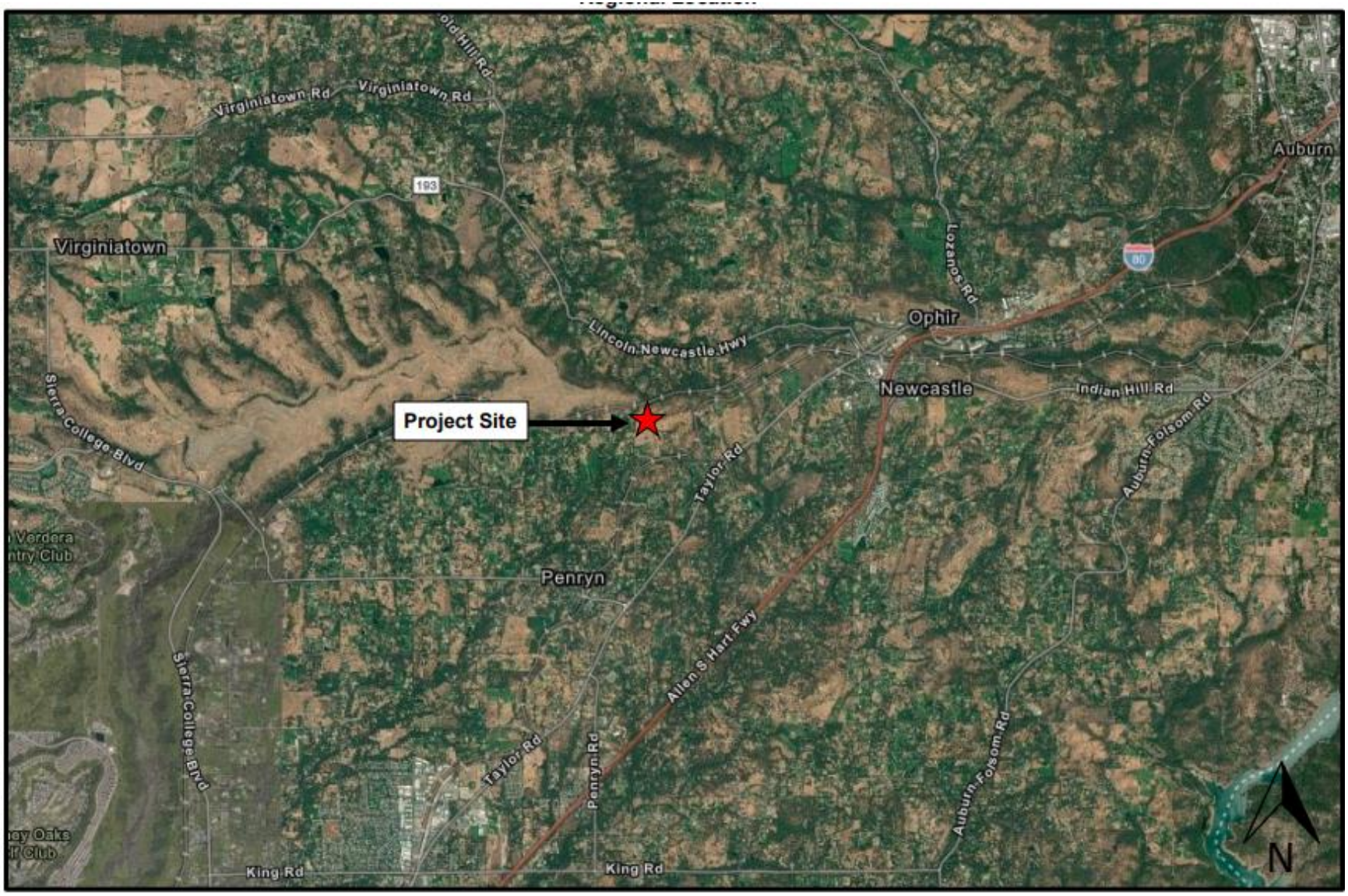


FIGURE 1. Project Vicinity Map.

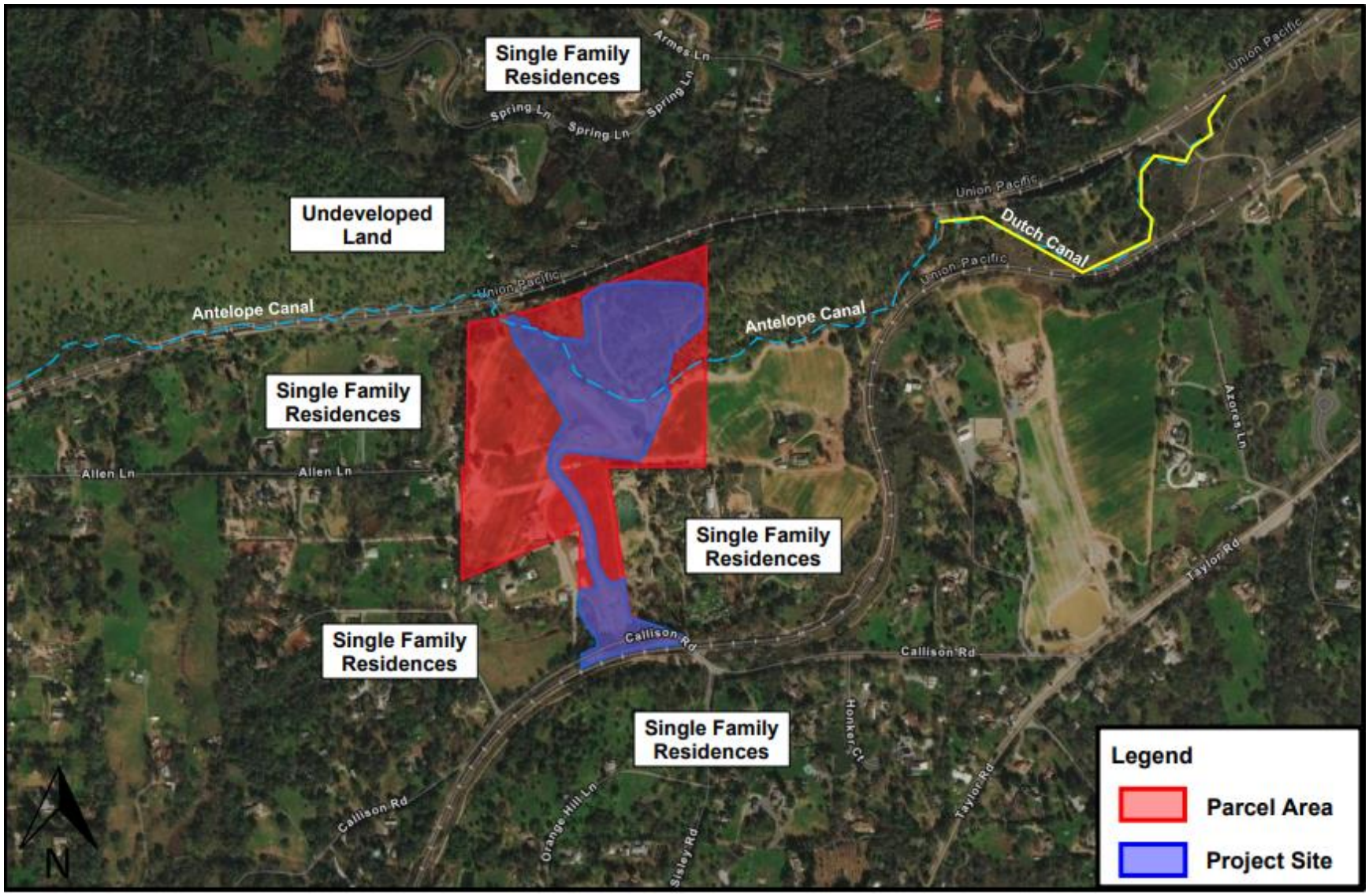


FIGURE 2. Area Map

2.0 Background Information

The technical evaluation presented in this report is based on available information related to climate and surface water, drilling records and well data, geology and groundwater occurrence, and well testing results.

2.1 Climate and Surface Water

The project site slopes toward the southwest, varying in elevation from approximately 740 feet near Callison Road to approximately 940 feet in the northeast part of the project site. There are no year-round surface water flows on the site, other than the Antelope Canal. Seasonal runoff is collected in an approximately 0.25-acre storm water retention pond located near the southwest corner of the parcel area shown on Figure 2.

The regional climate consists of warm, dry summers and cool winters. The nearest precipitation records reported by the Western Region Climate Center (WRCC) are from Rocklin, California to the west and Auburn, California to the east. The WRCC archives climatic data from a wide range of federal, regional, and state sources. The average annual rainfall totals for Rocklin and Auburn are reported to be 22.8 inches and 34.4 inches, respectively (WRCC, 2022).

2.2 Drilling Records and Well Data

This analysis is based in part on site specific well information, including drillers logs (referred to as well completion reports [WCRs]) and well test information. Well test information and WCRs for site wells were provided by BEM. Additional WCRs were obtained from the California Department of Water Resources (DWR) WCR Map Application website (DWR, 2022a). BEM also obtained additional well information from adjacent property owners and from Placer County.

Table 1 provides a summary of the WCRs reviewed for this analysis. Figure 3 shows the approximate locations of the project wells and adjacent private domestic wells. Most of the wells listed in Table 1 are 200 feet deep or shallower and produced 20 gallons per minute (gpm) or more when they were installed. However, there are four wells that produce 5 gpm or less. Two of these wells (Well #13-1 and Well #20-3) are located on vineyard property owned by BEM to the east of the project site and provide water for domestic purposes. As indicated in Table 1, these two wells were also drilled to much greater depths than other wells in the area. The well at 7429 Allen Lane is located approximately 700 feet northwest of the Public Well. The well at 7411 Callison Road is located approximately 1,000 feet to the southwest of the Public Well.

Water for the project will be provided by the Public Well, also referred to as Well 20-2, at the 7535 Ridgeview Lane property. The Public Well is 120 feet deep and produces groundwater from the interval from 60 feet below ground surface (ft bgs) to 120 ft bgs. At the time it was drilled, this well was able to produce up to 60 gpm. However, the pump that is currently installed in the well has a maximum capacity of 25 gpm.

TABLE 1

Well Completion Report (WCR) Summary

Project 8 Winery, Placer County, California

Owner's Well Number	*WCR Number*	*Address*	*Total Depth (ft bgs)*	*Production Interval (ft bgs)*	*First-Encountered Groundwater (ft bgs)*	*Static Depth to Groundwater (ft bgs)*	*Air Lift Test Rate (gpm)*	*Source*
19-1	e0340382 (2019)	7535 Ridgeview Ln (19-1)	120	80-120	60	25	60	BEM
20-2	2020-015796	7535 Ridgeview Ln (20-2)	120	60-120	75	25	60	BEM
17-1	2017-008327	7615 Callison Rd (17-1)	120	90-110	90	40	30	BEM
13-1	e0178126 (2013)	8085 (7665) Callison (13-1)	325	65-325	55	55	2	BEM
20-3	2020-015877	7851 Callison Rd (20-3)	600	60-600	48	15	3	BEM
6582	NR	7585 Callison Rd	90	NR	NR	10	55	BEM
1	2004-000064	7541 Ridgeview	175	45-175	37	5	20	DWR
8528	e0313614 (2016)	7715 Callison Rd	200	79-200	110	60	60	BEM
9628	2021-006860	7685 Callison Rd	200	82-200	95	50	25	DWR
8724	NR	7429 Allen Ln	700	30-700	3	24	1.8	BEM
One	1974-000003	7301 Ridgeview Ln	100	40-60	40	10	40	DWR
97-1	1997-004878	7411 Callison	180	30-180	NR	30	5	DWR

NR = Not Reported

ft bgs = feet below ground surface

gpm = gallons per minute

DWR = Department of Water Resources

BEM = Building Engineering and Maintenance, Inc.

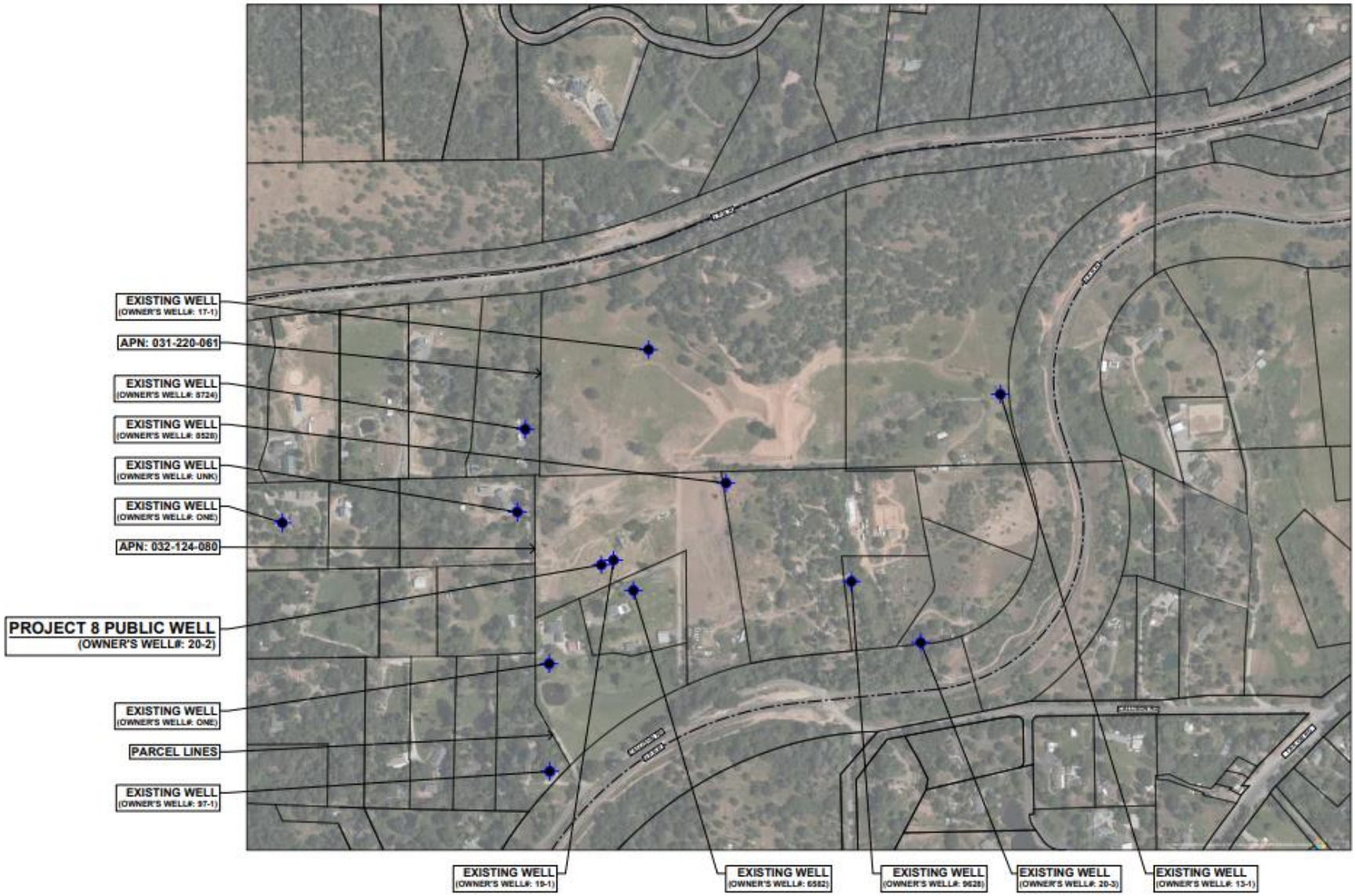


Figure 3. Well Location Map

2.3 Geology and Groundwater Occurrence

The project site is in the northern Sierra Nevada foothills. From a geological perspective, the site is underlain by the Penryn pluton, which is a large intrusion of medium to coarse-grained granitic rock (Wagner, et al., 1981) referred to as quartz diorite. The Penryn pluton is of upper Jurassic age (i.e., 145 million to 170 million years ago) (Gutierrez, 2011). Based on driller's reports for wells completed in the area, the granitic rocks may be weathered and decomposed to depths as great as 90 feet below ground surface (ft bgs).

In many parts of California, groundwater typically occurs in sedimentary deposits of sand and gravel that form groundwater aquifers. However, there are no sedimentary deposits at or near the project site. The groundwater encountered in wells drilled in the project vicinity occurs within fractures within the granitic bedrock. Within fractured bedrock, the groundwater surface generally mimics the topography, but with the depth to water being somewhat greater along ridges and near drainage divides and somewhat shallower at lower elevations and near drainages. Thus, groundwater tends to flow from the ridge areas down toward the main drainages, such that the surface topography of the watersheds also defines individual groundwater flow zones within a fractured bedrock groundwater system. The primary source of recharge is percolation of local rainfall.

The depth at which water was first encountered during drilling is typically noted on the WCRs. As shown in Table 1, the depth of first-encountered groundwater is reported for all but two wells. After a well is drilled and the casing is installed, the final groundwater level in the well may stabilize at a depth that is different than the depth at which groundwater was first encountered. For all wells except two listed in Table 1, the stabilized, or static, depth to groundwater is appreciably shallower than the depth of first-encountered groundwater. This relationship between the first-encountered and static groundwater depths means that the water within the fractures in the granitic bedrock is under pressure and is referred to as being under confined conditions. Confined conditions generally form when the area in which percolation of rainfall and recharge of the groundwater occurs is at a higher elevation than the location of the wells in which the groundwater levels are being measured.

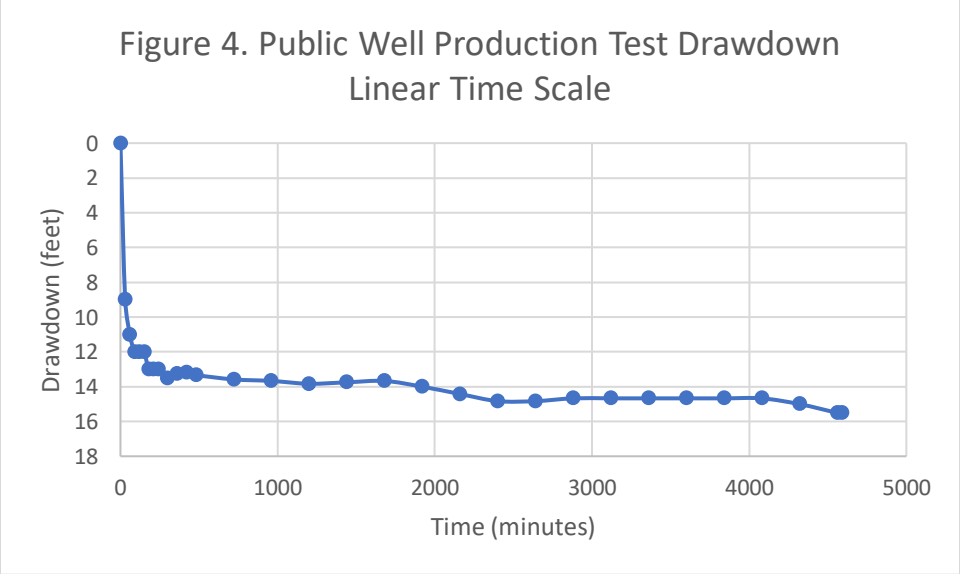
The low-producing deeper wells and those that are not under confined conditions are interpreted to be within an area of the Penryn pluton that does not have significant fracturing and, therefore, does not contain appreciable groundwater. The lack of fracturing indicates that these wells are not likely to be connected to the same fracture zones that occur at the Public Well.

The DWR Water Data Library provides groundwater level data for wells throughout the state. That information can reveal trends related to groundwater levels along with short-term and long-term cycles. The nearest wells to the project site for which data are available in the Water Data Library are in Rockling and Lincoln (DWR, 2022b). The data from those wells indicate that groundwater levels in the region are not substantially affected by fluctuations from wet periods to drought periods. The data also show that there are seasonal fluctuations that typically range from three feet to 10 feet between spring and fall of each year (DWR, 2022b).

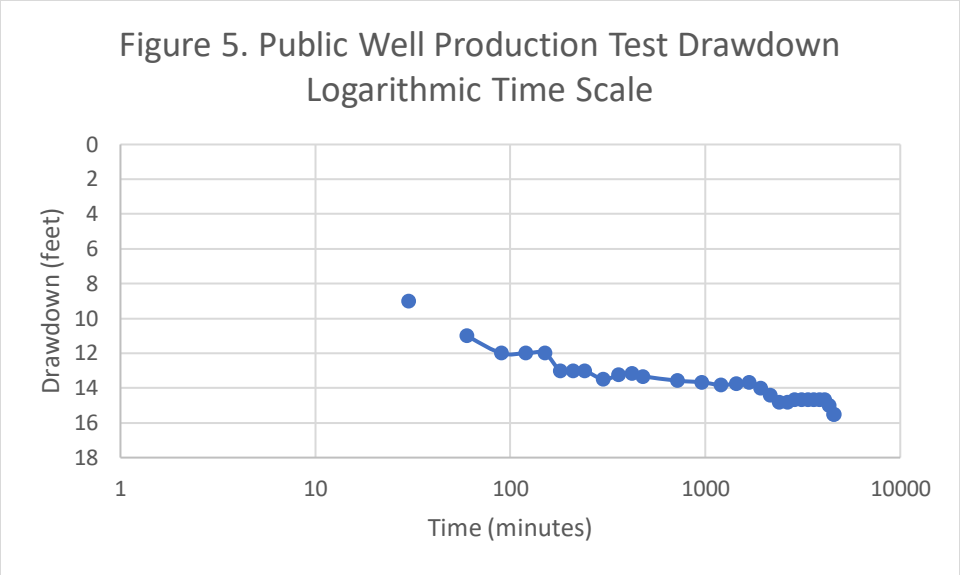
2.4 Well Testing Results

Well production testing has been conducted at two of the wells listed in Table 1.

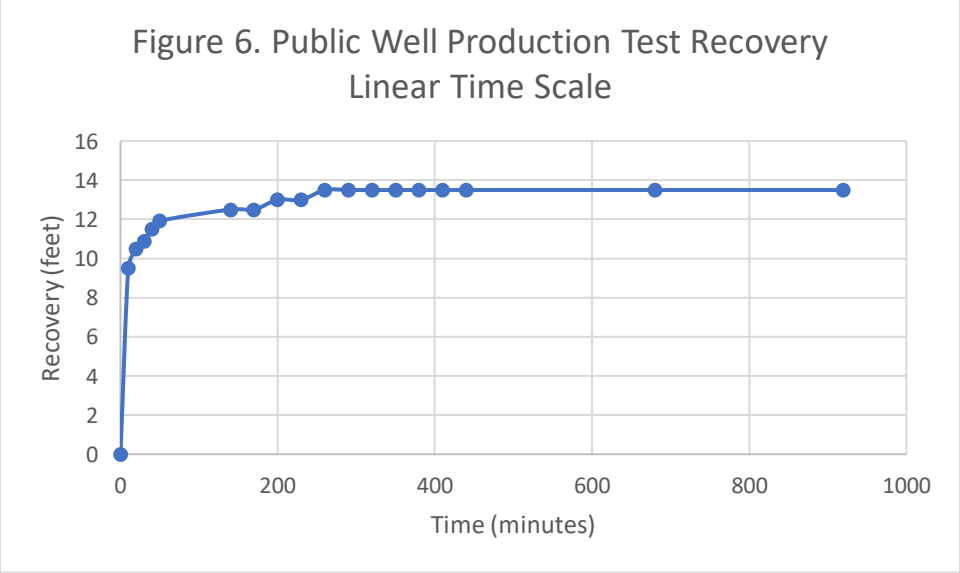
At the Public Well (Well #20-2), production testing was conducted by Peter's Drilling and Pump Service over a 76.5-hour period from January 5, 2021 to January 8, 2021. As noted above, although the initial testing indicated that this well could produce up to 60 gpm, the pump in the well will produce a maximum of 25 gpm. During the test, the depth to groundwater fell from 23 ft bgs to 38.5 ft bgs. After the production test ceased, the groundwater level in the well recovered to 25 ft bgs within four hours after pumping ceased. Figures 4 and 5 show the drawdown of the groundwater level during pumping with a normal and a logarithmic time scale, respectively. Figures 6 and 7 show the recovery of the groundwater level after pumping ceased, with a normal and logarithmic time scale, respectively. Comparison of the data on Figures 5 and 7 indicate that the drawdown rate during pumping and the recovery rate after pumping were both approximately two feet per log cycle. The similarity of the drawdown and recovery rates on these two figures indicates that the data are representative of the actual aquifer conditions and are not unduly affected by interferences or other factors.



The private well at 7585 Callison Road was test pumped by R&R Pump Service on October 22, 2002. Although the well was initially tested at 55 gpm when drilled, the pump in this well limits production to nine gpm. The test pumping in this well occurred for two hours and the groundwater level dropped from 10 ft bgs to 20 ft bgs during this period. No further information is available regarding recovery or other parameters.



A key parameter used to evaluate the effects of well pumping on an aquifer and adjacent wells is referred to as the transmissivity, which provides an indication of the permeability of water-bearing geologic unit by providing a measure of how easily it will transmit groundwater. The transmissivity of the fractured bedrock beneath and adjacent to the site can be estimated based on empirical relationships between test pumping rates and the amount of drawdown observed (Thomasson et al., 1960). The ratio of the pumping rate, in gpm, divided by the drawdown at that pumping rate, in feet, is referred to as the specific capacity. Multiplying the specific capacity by a constant of 1.2 yields an estimated aquifer transmissivity value, in gallons per minute per foot (gpm/ft) (Thomasson et al., 1960). That value can then be converted to the more common units of feet squared per day (ft^2/d).



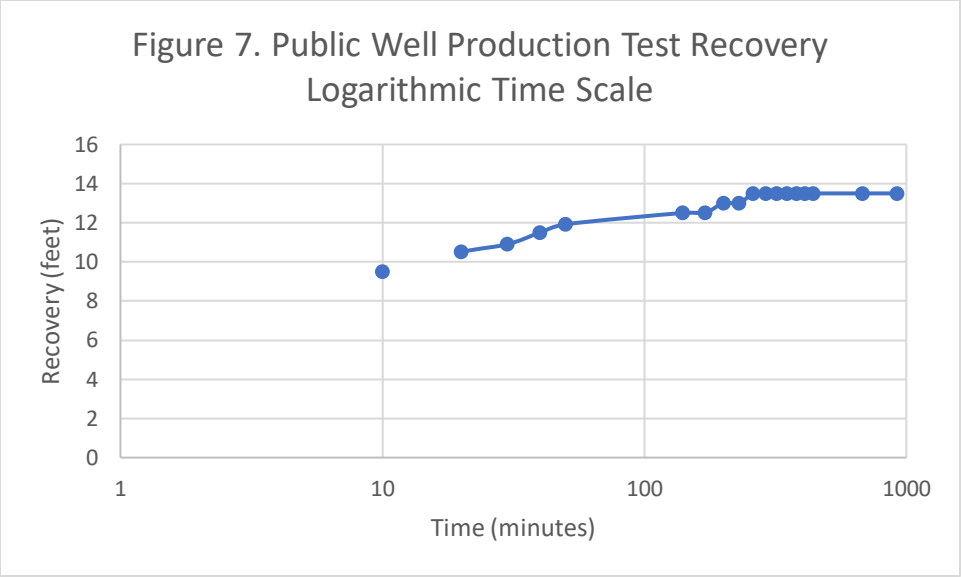


Table 2 provides the specific capacity and transmissivity values that were derived from the production tests of the Public Well and the private supply well at 7585 Callison Road. The transmissivity values in Table 2 were used in the evaluation of the potential effects of pumping of the Public Well, as described below.

TABLE 2

Transmissivity Estimates Based on Specific Capacity

Project 8 Winery, Placer County, California

Well Location	Pumping Rate	Drawdown	Specific Capacity	Transmissivity		
			Sc	Cc=1.2		
	GPM	(FT)	(GPM/FT)	(GPM/FT)	GPD/FT	FT^2/D
Public Well (7535 Ridgeview - 20-2)	25	15.5	1.613	1.9	2787.1	372.6
7585 Callison	9	10	0.900	1.1	1555.2	207.9

3.0 Effects of Public Well Use

Domestic water demand for the Project 8 Winery is described in a Technical Report prepared by Cranmer Engineering, Inc. supporting an application for a Domestic Water Permit (Cranmer Engineering, Inc., 2020). The analysis of water demand is based upon a typical use that would occur 353 days per year and special event use that would occur 12 days per year, spread throughout the year. The special event use includes what are referred to as agricultural promotional events. The maximum day demand (MDD) and peak hour demand (PHD) were calculated based on projected numbers of visitors and employees for different project components (e.g., tasing room, restaurant) and for special events and agricultural promotional events, following state standards (Cranmer Engineering, Inc., 2020). The MDD is equivalent to pumping at 4.98 gpm for 24 hours while the PHD is equivalent to pumping at 7.47 gpm for 60 minutes. The MDD is calculated as 1.5 times the average daily demand. Therefore, the average water demand for typical use (i.e., 353 days per year) is 3.32 gpm.

As noted above, the water demand for the potable and winery components of the project will be provided by the Public Well. To evaluate the effect on groundwater levels and neighboring wells, an analytical model was developed to calculate the drawdown of the groundwater levels that would occur due to pumping from the Public Well. Groundwater pumping typically causes what is referred to as a drawdown cone to form around the pumping well. The maximum drawdown occurs at the pumping location and then decreases radially away from that point. Thus, the closer that a neighboring well is to the pumping location, the larger the drawdown that will occur at that location. The nearest non-project well to the Public Well is the private supply well at 7585 Callison Road. These two wells are approximately 150 feet apart.

The analytical model that was used for this evaluation is based on the Theis equation (Domenico and Schwartz, 1990; Freeze and Cherry, 1979). If the aquifer properties, such as transmissivity, are known, along with the pumping rate, then the Theis Equation can provide the total drawdown at any distance from the pumping source at any time during the simulation period. This allows the actual drawdown cone to be identified. As described above, production test pumping has occurred at both the Public Well and the private well at 7585 Callison Road, yielding different transmissivity values. Therefore, the analytical simulation was run using both transmissivity values to define the potential range of effects.

Based on the potential variation in water demand as described above, the following scenarios were simulated to identify the effect at neighboring wells:

A. Typical use at 3.32 gpm for 353 days;
B. MDD at 4.98 gpm for 12 consecutive days; and
C. PHD at 7.74 gpm for 6 consecutive hours.

Scenario A represents the average use scenario throughout most of the year. Scenario B represents the peak daily demand during special event and agricultural promotional events. It is anticipated that these events would be spread out throughout the year and would not occur over consecutive days. Thus, Scenario B represents a conservative over-estimate of the potential effects of the special event water demand. Scenario C represents the anticipated peak hourly demand during a special event period. The PHD generally represents a spike in demand at the peak attendance hour or other similar circumstance such that water use at that rate is not sustained beyond that peak hour. Therefore, Scenario C also represents a conservative over-estimate of the effects of short-term spikes in water demand.

Figure 8 shows the simulated drawdown that would occur under Scenario A, where the Public Well is pumped at 3.32 gpm for 353 days. The drawdown that would occur at the well at 7585 Callison Road is projected to range from 1.0 foot to 1.6 feet, depending on the transmissivity value. Since the lower transmissivity value of 208 ft^2/day was estimated from the production test at the 7585 Callison Road well, it may be more appropriate to use the simulated drawdown of 1.6 feet at a distance of 150 feet as the anticipated effect of pumping under Scenario A.

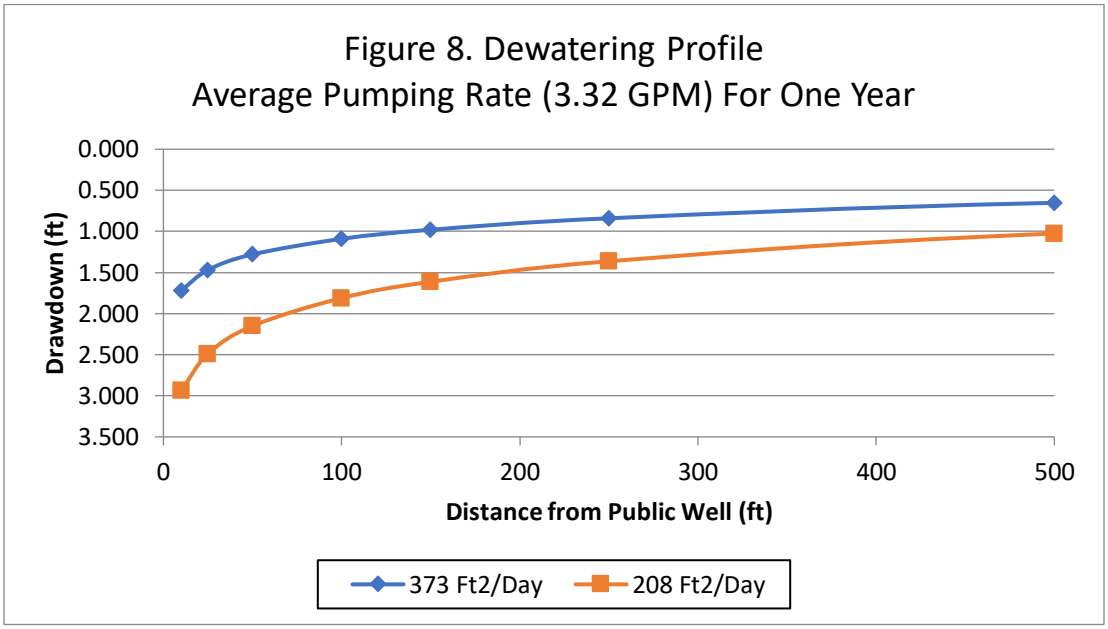


Figure 9 shows the simulated drawdown that would occur under Scenario B, where the Public Well is pumped at the MDD of 4.98 gpm for 12 days. The drawdown that would occur at the well at 7585 Callison Road is projected to range from 0.8 foot to 1.2 feet, depending on the transmissivity value. As with Scenario A, the lower transmissivity value of 208 ft^2/day was estimated from the production test at the 7585 Callison Road well, so it may be more appropriate to use the simulated drawdown of 1.2 feet at a distance of 150 feet as the anticipated effect of pumping under Scenario B.

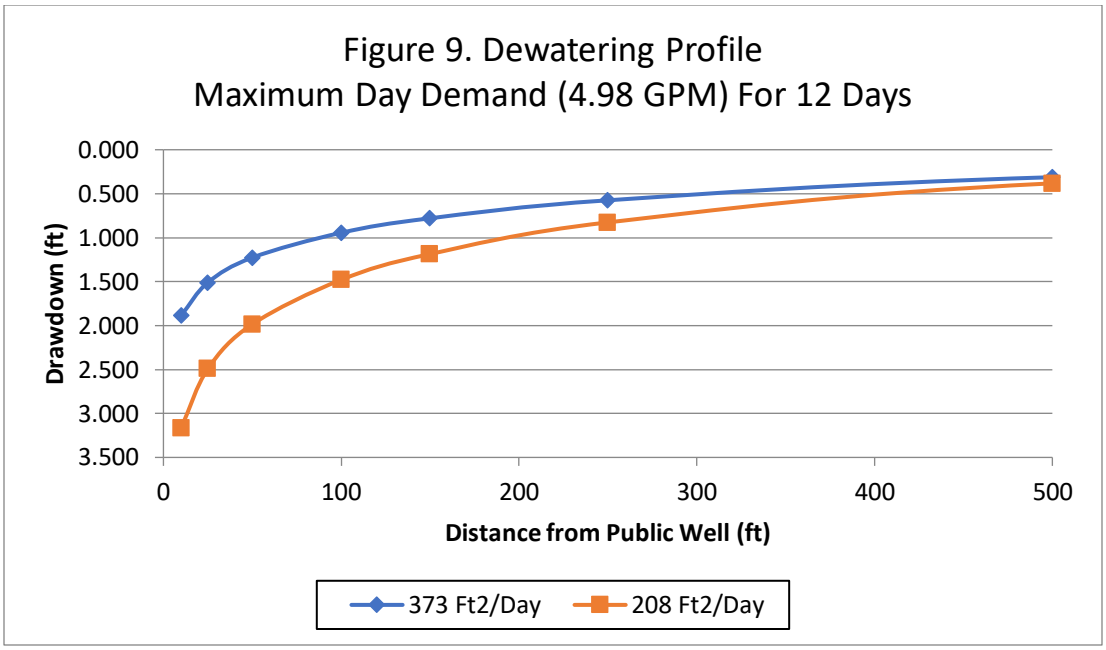


Figure 10 shows the simulated drawdown that would occur under Scenario C, where the Public Well is pumped at the PHD of 7.47 gpm for six hours. The drawdown that would occur at the well at 7585 Callison Road is projected to range from 0.14 foot to 0.11 foot, depending on the transmissivity value.

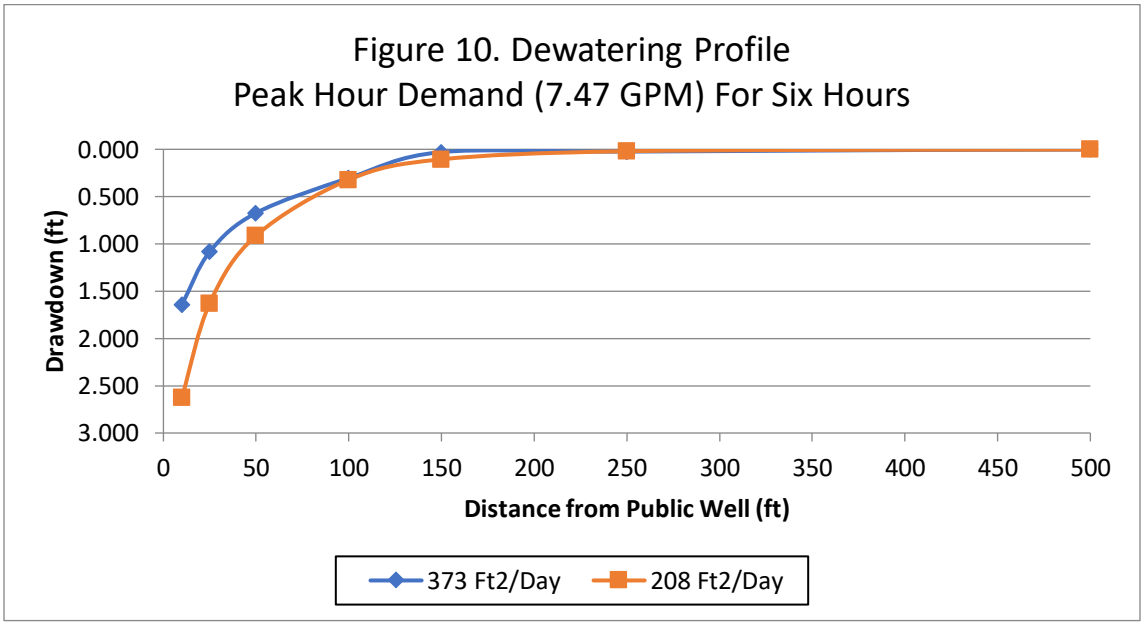


Table 3 summarizes the simulation results for Scenarios A, B, and C. The pumping rates for Scenarios B and C are greater than that for Scenario A. However, the duration of pumping

under Scenario A is appreciably longer than for the other two scenarios. Thus, the greatest drawdown occurs under the long-term average operation of the project. The short-term drawdowns for special events could create a cumulative addition to the long-term average. However, under more realistic conditions, a single day special event would incrementally add 0.3 foot of drawdown to the 1.6-foot long-term average while a single peak hour would add 0.03 foot of drawdown. Thus, the peak simulated drawdown that could occur at the nearest well location at 7585 Callison Road due to long-term project operation is predicted to be 1.93 feet for short durations during the peak hour demand during a special event. As indicated on Figures 8 through 10, the drawdowns that would occur at wells located further than 150 feet from the Public Well would be substantially less than those shown in Table 3.

TABLE 3

Projected Drawdowns at 150 Ft from Pumping Well for Scenarios A, B, and C

Project 8 Winery, Placer County, California

Scenario	Pumping Rate (gpm)	Duration (days)	Drawdown (feet)	
			High T Value	Low T Value
A. Average Rate for 353 Days	3.32	353	1.0	1.6
B. MDD for 12 Days	4.98	12	0.80	1.2
C. PHD for 6 Hours	7.47	0.25	0.14	0.11

4.0 Conclusions

This evaluation of the potential impact of use of the Public Well on neighboring properties is based on a wide range of local and regional data. These data sources include regional groundwater and geologic information from DWR and the California Geologic Survey, local well information from the WCRs, and well production tests conducted on the Public Well and the nearest neighboring well. The available data provides a reliable assessment of the groundwater production in local wells and the fractured bedrock properties, such as the transmissivity. The site-specific, local, and regional data have been incorporated into an analytical model to simulate the effects of various project water use scenarios on groundwater levels. That simulation relies on multiple conservative assumptions that are intended to over-predict the amount of drawdown at neighboring well locations in order to provide an assessment that is protective of groundwater resources.

The analytical simulations show that the overall maximum long-term effect at the nearest neighboring well, at 7585 Callison Road, is predicted to be 1.6 feet. During peak short-term water demand during special events, the effect could be as much as 1.93 feet. These drawdowns are less than the typical seasonal fluctuations in groundwater levels observed in wells throughout the region and are, therefore, within the range of existing baseline variations in groundwater levels.

Available data show that the 7585 Callison Well is 90 feet deep while the static depth to groundwater is 10 ft bgs, such that the well has an available static water column of 80 feet. When the pump in that well operates, the depth to water drops to 20 ft bgs, providing a water column of 70 feet. The average and maximum short-term effect from use of the Public Well for the project would add an additional 1.6 feet to those drawdowns but could add as much as 1.93 feet over a short period (approximately one hour). Thus, the use of the Public Well could potentially decrease the static water column in the well by no more than two percent long term and 2.4 percent on a short-term basis and could decrease the available water column by no more than 2.3 percent to 2.8 percent when the 7585 Callison Road well is operating. These reductions in the water column at the nearest neighboring well are considered to be de minimis and would have no impact on the use of the 7585 Callison Road well.

Since the magnitude of the change in groundwater levels that would occur during pumping of the Public Well will decrease radially away from the well, the effects at more distant wells would be appreciably less than those that are identified in this evaluation for the nearest well at 7585 Callison Road. Therefore, in response to the comment from Placer County to BEM, this Public Well Impact Evaluation provides substantial evidence that use of the on-site Public Well for the project operations will not have any adverse effects on the wells of neighboring property owners.

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APPENDIX O

Environmental Noise & Vibration Assessment

Project 8 Winery

Placer County, California

BAC Job # 2021-141

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September 21, 2022

BOLLARD
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Introduction

The Project 8 Winery (project) is located at 7615 Callison Road in Penryn (Placer County), California. The proposed project consists of development of a full-production winery, including wine production facilities, tasting room, accessory restaurant, and associated facilities on approximately 17.96 acres within three separate contiguous parcels, which combined total 44.14 acres (APN's: 031-220-061, 032-124-080 and 032-124-044). Existing land uses within the immediate project vicinity include a combination of agricultural and rural residential in all directions. The project area with aerial imagery is shown in Figure 1.

The purposes of this assessment are to quantify the existing noise and vibration environments, identify potential noise and vibration impacts resulting from the project, identify appropriate mitigation measures, and provide a quantitative and qualitative analysis of impacts associated with the project. Specifically, impacts are identified if project-related activities would cause a substantial increase in ambient noise or vibration levels at existing sensitive land uses in the project vicinity, or if future traffic or project-generated noise or vibration levels would exceed applicable federal, state, or local standards at existing sensitive uses.

Noise and Vibration Fundamentals

Noise

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are designated as sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or Hertz (Hz). Definitions of acoustical terminology are provided in Appendix A.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in Figure 2.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise. DNL is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Vibration

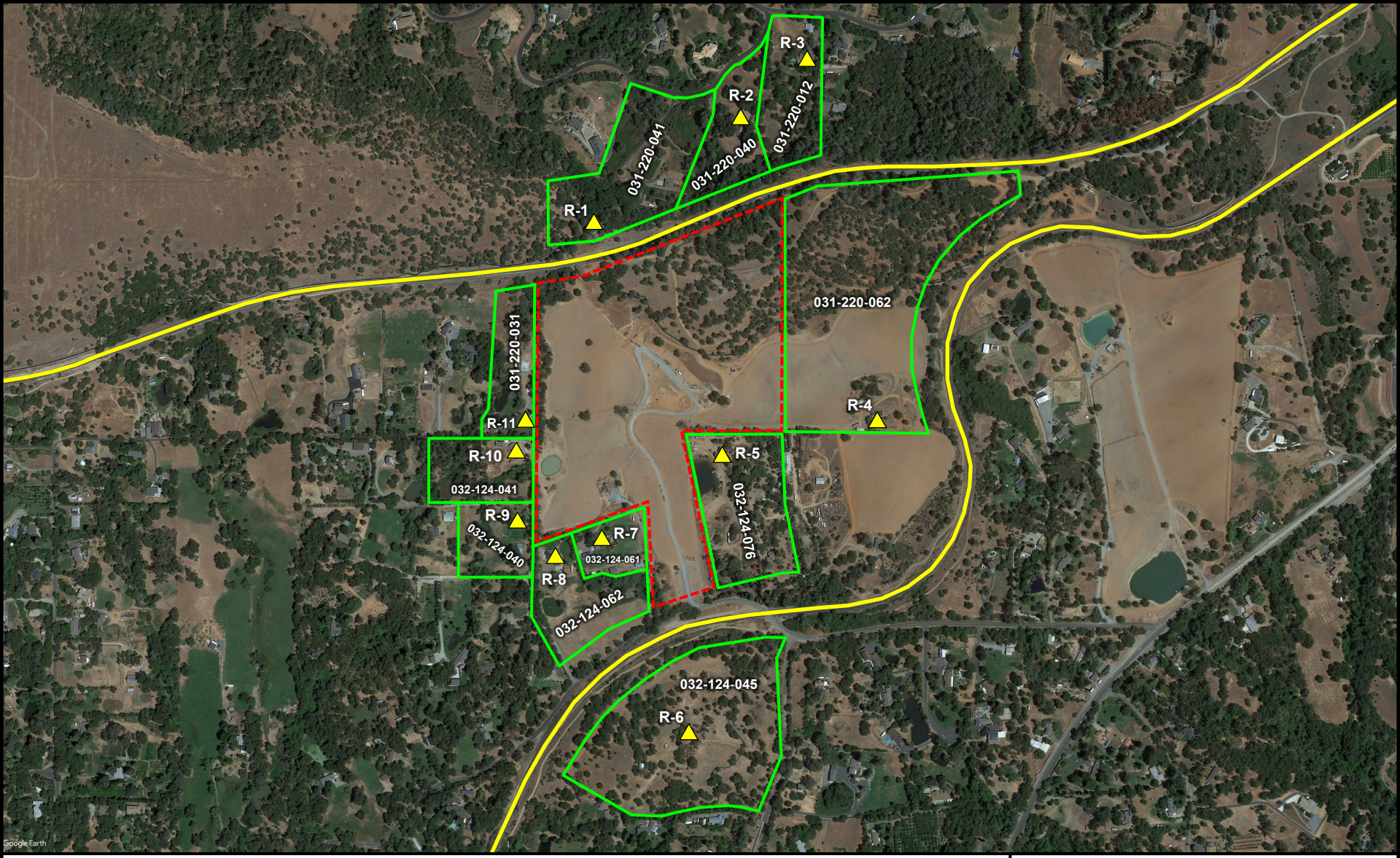
Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance.

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, April 2020), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.



Legend

- Project Property Boundaries (Approximate)
- UPRR Railroad Tracks
- Parcel Boundaries
- Noise-Sensitive Receivers (Existing Residences)

N

Scale (Feet)

0 250 500

Project 8 Winery

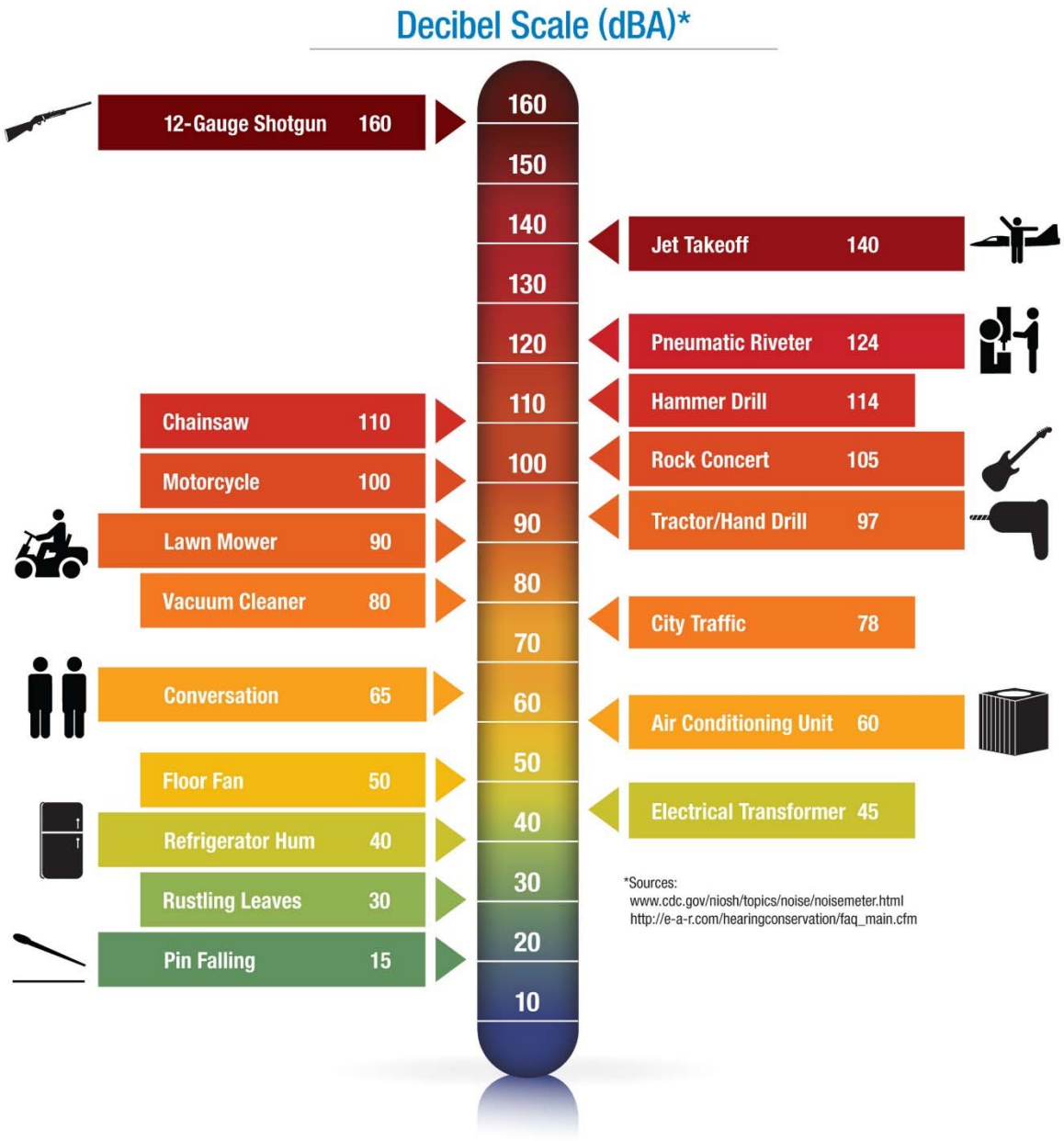
Placer County, California

Project Area & Nearby Residential Uses

Figure 1

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Figure 2
Noise Levels Associated with Common Noise Sources



Environmental Setting – Existing Ambient Noise and Vibration Environment

Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities. The nearest off-site noise-sensitive land uses which would potentially be affected by the project consist of rural residential in all directions. The project area and nearby residential receivers are shown on Figure 1.

Existing Traffic Noise Levels along Project Area Roadway Network

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to develop existing noise contours expressed in terms of DNL for major roadways within the project study area. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

Traffic data in the form of Weekday PM (4:00 p.m. to 6:00 p.m.) and Saturday Noon (12:00 p.m. to 1:00 p.m.) peak hour turning movements for existing conditions were obtained from the project traffic consultant, KD Anderson & Associates, Inc. Average daily traffic volumes (ADT's) were conservatively estimated by applying a factor of 10 to peak hour conditions. Using these data and the FHWA Model, existing traffic noise levels were calculated. The traffic noise level at 100 feet from the roadway centerline and distances from the centerlines of selected roadways to the 60 dB DNL, 65 dB DNL, and 70 dB DNL contours are summarized in Tables 1 and 2.

In many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. It is also recognized that existing sensitive land uses within the project vicinity are located varying distances from the centerlines of the local roadway network. The 100-foot reference distance is utilized in this assessment to provide a reference position at which changes in traffic noise levels resulting from the project can be evaluated. Appendix B contains the FWHA Model inputs for existing conditions.

Table 1
Existing Traffic Noise Modeling Results – Weekday PM Peak Hour

Seg.	Intersection	Direction	DNL 100 ft from Roadway	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	60	21	46	99
2		South	59	19	42	90
3		East	58	16	34	74
4		West	62	27	59	128
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	54	9	19	40
6		South	48	3	8	16

Table 1
Existing Traffic Noise Modeling Results – Weekday PM Peak Hour

Seg.	Intersection	Direction	DNL 100 ft from Roadway	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
7		East	59	18	39	84
8		West	59	19	42	90
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	53	8	17	36
10		South	57	14	30	65
11		East	60	22	46	100
12		West	55	9	20	44
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	60	22	47	100
14		South	56	11	24	51
15		East	63	32	70	150
16		West	59	18	39	85
17	(5) Old State Hwy/Taylor Rd	North	38	1	2	4
18		South	58	15	32	69
19		East	61	25	54	117
20		West	56	12	26	55
21	(6) Taylor Rd/Callison Rd	North	60	21	46	100
22		South	60	21	46	99
23		East	--	--	--	--
24		West	49	4	9	19
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	41	1	2	5
27		East	48	4	8	17
28		West	49	4	8	18
29	(8) Project Dwy/Callison Rd	North	--	--	--	--
30		South	--	--	--	--
31		East	49	4	8	18
32		West	49	4	8	18
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	60	23	49	106
34		South	61	26	56	120
35		East	53	7	15	33
36		West	57	13	27	59
37	(10) Taylor Rd/Penryn Rd	North	61	27	58	125
38		South	60	20	44	95
39		East	59	19	40	86
40		West	34	0	1	2
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	60	20	44	94
42		South	61	25	53	114
43		East	59	18	38	82
44		West	58	16	35	75
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	61	24	53	114
46		South	60	22	48	104
47		East	45	2	5	10
48		West	59	18	40	86

Blank cell = no traffic data was provided
Source: FHWA-RD-77-108 with inputs from KD Anderson. Appendix B contains FHWA model inputs.

Table 2
Existing Traffic Noise Modeling Results – Saturday Noon Peak Hour

Seg.	Intersection	Direction	DNL 100 ft from Roadway	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	58	16	36	77
2		South	58	16	34	73
3		East	57	15	32	68
4		West	61	23	51	109
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	52	7	14	30
6		South	47	3	7	14
7		East	58	16	33	72
8		West	58	16	34	73
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	53	7	16	35
10		South	58	16	34	74
11		East	59	20	42	91
12		West	53	8	17	37
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	60	20	43	93
14		South	56	11	23	50
15		East	62	30	64	139
16		West	58	16	34	74
17	(5) Old State Hwy/Taylor Rd	North	34	0	1	2
18		South	56	12	26	57
19		East	60	20	43	93
20		West	55	10	22	47
21	(6) Taylor Rd/Callison Rd	North	58	17	37	79
22		South	58	17	36	78
23		East	--	--	--	--
24		West	48	3	7	16
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	39	1	2	4
27		East	47	3	7	14
28		West	47	3	6	13
29	(8) Project Dwy/Callison Rd	North	--	--	--	--
30		South	--	--	--	--
31		East	47	3	6	13
32		West	47	3	6	13
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	59	18	40	85
34		South	60	23	50	107
35		East	52	7	14	31
36		West	56	12	25	55
37	(10) Taylor Rd/Penryn Rd	North	61	24	51	110
38		South	58	17	36	78
39		East	59	18	39	83
40		West	31	0	1	1
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	60	21	45	98
42		South	61	24	51	109
43		East	59	18	38	82
44		West	58	15	32	69
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	61	24	51	110

Table 2
Existing Traffic Noise Modeling Results – Saturday Noon Peak Hour

Seg.	Intersection	Direction	DNL 100 ft from Roadway	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
46		South	60	20	44	94
47		East	45	2	5	11
48		West	58	17	36	77

Blank cell = no traffic data was provided
Source: FHWA-RD-77-108 with inputs from KD Anderson. Appendix B contains FHWA model inputs.

Existing Overall Ambient Noise Environment in Project Vicinity

The existing ambient noise environment within the project vicinity is defined primarily by noise from distant roadway traffic, and by intermittent railroad operations on adjacent UPRR tracks to the north and south. To generally quantify existing ambient noise environment within the project vicinity, BAC conducted long-term (96-hour) ambient noise level measurements at four (4) locations from March 31st to April 3rd, 2022. The long-term noise survey locations are shown on Figure 3, identified as sites 1 through 4. Photographs of the noise survey locations are provided in Appendix C.

Larson Davis Laboratories (LDL) Model LxT, 820 and 831 precision integrating sound level meters were used to complete the long-term noise level survey. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4). The results of the long-term ambient noise survey are shown numerically and graphically in Appendices D and E (respectively) and are summarized in Table 3.



Legend

- Project Parcel Boundary (Approximate)
- UPRR Railroad Tracks
- Long-Term Ambient Noise Measurement Sites
- Noise-Sensitive Receivers (Existing Residences)

N

Scale (Feet)

0 150 300

Project 8 Winery

Placer County, California

Project Area & Long-Term Noise Survey Sites

Figure 3

BOLLARD Acoustical Consultants

Table 3
Summary of Long-Term Ambient Noise Survey Results – Project 8 Winery[1]

Site Description[2]	Date	DNL (dB)	Average Measured Hourly Noise Levels (dBA)[3]			
			Daytime		Nighttime	
			L_{eq}	L_{max}	L_{eq}	L_{max}
Site 1: North end of project area near UPRR track	3/31/22	70	67	82	63	65
	4/1/22	76	68	81	69	70
	4/2/22	71	66	75	65	62
	4/3/22	71	62	70	65	81
Site 2: Southwest end of project area adjacent to residential uses	3/31/22	57	58	76	45	56
	4/1/22	58	58	76	48	62
	4/2/22	54	54	72	44	58
	4/3/22	59	56	71	52	68
Site 3: South end of project area adjacent to residential uses	3/31/22	52	49	67	45	58
	4/1/22	55	52	68	48	59
	4/2/22	53	53	68	44	56
	4/3/22	55	50	71	48	67
Site 4: East of project area adjacent to residential uses	3/31/22	61	63	75	43	58
	4/1/22	62	62	77	53	64
	4/2/22	62	64	75	42	57
	4/3/22	69	65	76	61	73

[1] Detailed summaries of the noise monitoring results are provided in Appendices D and E.
[2] Long-term ambient noise monitoring locations are identified on Figure 3.
[3] Daytime hours: 7:00 AM to 10:00 PM | Nighttime hours: 10:00 PM to 7:00 AM
Source: Bollard Acoustical Consultants, Inc. (2022)

BAC measurement sites 1 and 3 were specifically selected to be representative of the ambient noise level environments at the nearest existing residential uses to the north and south of the project area (respectively), located near adjacent UPRR railroad tracks. Noise level measurements obtained at sites 2 and 4 are believed to be representative of the ambient noise level environments at the nearest existing residential uses to the west and east of the project (respectively), which have further setbacks from the UPRR tracks.

As shown in Table 3, measured ambient noise levels were highest at site 1. This is believed to be due to train passbys on the adjacent UPRR tracks to the north. It should be noted that, upon analysis of the measurement data for site 4, it was determined that noise levels measured on April 3rd, 2022, were anomalously high relative to levels measured at that same location in previous days. Although the source(s) affecting the measurements at site 4 during that 24-hour period are not specifically known, the possibilities include motorized landscape equipment or other activities at nearby residential uses. Nonetheless, the ambient noise levels measured at site 4 on April 3rd, 2022, are considered to be unreliable, and are not believed to be representative of the normal ambient noise level environment within vicinity of that measurement location.

Existing Ambient Vibration Environment in Project Vicinity

During a site visit on March 29th, 2022, BAC staff noted that vibration levels were below the threshold of perception at all locations surrounding the project site and in the immediate project vicinity. Therefore, the existing vibration environment in the immediate project vicinity is considered to be negligible. It should be noted that, during the passage of trains on the nearby UPRR tracks, vibration levels within 100 feet of the tracks would be expected to be perceptible, but otherwise ambient vibration conditions are considered negligible.

Regulatory Setting: Criteria for Acceptable Noise and Vibration Exposure

Federal

There are no federal noise or vibration criteria which would be directly applicable to this project. However, Placer County does not currently have a policy for assessing noise impacts associated with increases in ambient noise levels from project-generated noise sources. As a result, the following federal noise criteria was applied to the project.

Federal Interagency Commission on Noise (FICON)

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project-related noise level increases. The criteria shown in Table 4 was developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The FICON standards have been used extensively in recent years in the preparation of the noise sections of Environmental Impact Reports that have been certified in many California cities and counties.

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a very conservative approach to impact assessment for this project.

Table 4
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project (DNL)	Change in Ambient Noise Level Due to Project
<60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more
Source: Federal Interagency Committee on Noise (FICON)	

Based on the FICON research, as shown in Table 4, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the

project are less than 60 dB DNL. Where pre-project ambient conditions are between 60 and 65 dB DNL, a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB DNL, a 1.5 dB increase is considered by FICON as the threshold of significance.

State of California

California Environmental Quality Act (CEQA)

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. According to Appendix G of the CEQA guidelines, the project would result in a significant noise or vibration impact if the following occur:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies.

B. Generation of excessive groundborne vibration or groundborne noise levels.

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

California Department of Transportation (Caltrans)

Placer County does not currently have adopted standards for groundborne vibration. As a result, the vibration impact criteria developed by the California Department of Transportation (Caltrans) was applied to the project. The Caltrans guidance criteria for building structure and vibration annoyance are presented in Tables 5 and 6, respectively.

Table 5
Caltrans Guidance for Building Structure Vibration Criteria

Structure and Condition	Limiting PPV (in/sec)
Historic and some old buildings	0.5
Residential structures	0.5
New residential structures	1.0
Industrial buildings	2.0
Bridges	2.0

PPV = Peak Particle Velocity
Source: 2020 Caltrans Transportation and Construction Vibration Guidance Manual, Table 14.

Table 6
Caltrans Guidance for Vibration Annoyance Potential Criteria

	Maximum PPV (in/sec)	
Human Response	Transient Sources	Continuous/Frequent Intermittent Sources
Severe/very disturbing	2.0	0.4 to 3.6
Strongly perceptible	0.9	0.1
Distinctly perceptible	0.24	0.035
Barely/slightly perceptible	0.035	0.012

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers and vibratory compaction equipment.
PPV = Peak Particle Velocity
Source: 2020 Caltrans Transportation and Construction Vibration Guidance Manual, Tables 4 & 6.

Local

Placer County General Plan

The Noise Element of the Placer County General Plan (Section 9) contains the County's noise-related policies. The specific policies which are generally applicable to this project are reproduced below:

Policies

9.A.2. Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 7 (GP Table 9-1) as measured immediately within the property line of lands designated for noise-sensitive uses: provided however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

9.A.5. Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 7 (GP Table 9-1) at existing or

planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design.

9.A.6. The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 8 (GP Table 9-3).

9.A.9. Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 8 or the performance standards in Table 8 at the outdoor activity areas or interior spaces of existing noise-sensitive land uses.

9.A.12. Where noise mitigation measures are required to achieve the standards of Tables 7 and 8, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Table 7
Allowable DNL Noise Levels Within Specified Zone Districts[1]
Applicable to New Projects Affected by or Including Non-Transportation Noise Sources

Zone District of Receptor	Property Line of Receiving Use	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	--	45
Industrial Park	75	45
Industrial Reserve	--	45
Airport	--	45
Unclassified	--	--
Farm	(see footnote 6)	--
Agriculture Exclusive	(see footnote 6)	--
Forestry	--	--
Timberland Preserve	--	--
Recreation & Forestry	70	--
Open Space	--	--
Mineral Reserve	--	--

Notes:

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable DNL shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, or if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 7 and Table 8. Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 7 and 8, said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.
- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

[1] Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels. Interior spaces are

defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

[2] Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

[3] Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses.
For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

[4] Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards.

Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

[5] State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

[6] Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an DNL of 70 dBA will be considered acceptable outdoor exposure at a residence.

Source: Placer County General Plan Noise Element, Table 9-1

Table 8
Maximum Allowable Noise Exposure
Transportation Noise Sources

	Outdoor Activity Areas[1]	Interior Spaces	
Noise Sensitive Land Uses (FY)	**DNL/CNEL (dB)**	**DNL/CNEL (dB)**	**L_{eq} (dB)[2]**
Residential	60[3]	45	--
Transient Lodging[4]	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2] As determined for a typical worst-case hour during period of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB DNL /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB DNL/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Placer County General Plan Noise Element, Table 9-3

Placer County Code

The provisions of the Placer County Code which would be most applicable to this project are reproduced below.

9.36.030 Exemptions.

A. Sound or noise emanating from the following sources and activities are exempt from the provisions of this title:

7. Construction (e.g., construction, alteration, or repair activities) between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order.

9. Sound sources associated with agricultural operations on agricultural land, as defined by Placer County Code Article 5.24.040, which are carried out in any manner consistent with the practice and within the standards of the agricultural industry. This includes without limitation all mechanical devices, apparatus or equipment utilized for the protection or salvage of agricultural crops during periods of adverse weather conditions or when the use of mobile sources is necessary for pest control.

9.36.060 Sound limits for sensitive receptors.

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied, or otherwise controlled by such person that:

1. Causes the exterior sound level when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five dBA; or

2. Exceeds the sound level standards as set forth in the following table, whichever is greater:

Sound Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq}, dB	55	45
Maximum Level, (L_{max}) dB	70	65

B. Each of the sound level standards specified in the above table shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of this section.

17.56.330 Winery and farm breweries.

E. Development and Operational Standards. The following development and operational standards shall apply to all wineries and farm breweries, and expansions of existing lawfully operating facilities. If a winery or farm brewery is required to have a use permit by this section, the standards will be applied in accordance with the conditions placed on those entitlements.

These standards will be applied with flexibility to encourage activities for the protection and preservation of agriculture.

4. Noise Regulations.

    a. All winery and farm brewery facilities shall be subject to Placer County Code Article 9.36 (Noise), unless a more restrictive standard is specified in a community plan.

    b. Prior to hosting events with amplified speech or music and weddings, the owner/operator shall submit a site plan to the community development resource agency. The site plan shall identify the proposed outdoor location of the event and the distance to the nearest residential receptor property line. If the distance between the proposed sound source and nearest sensitive receptor property line is greater than shown in the table below, the additional acoustical analysis shall not be required. If the distance between the proposed sound source location and nearest sensitive receptor property line is less than shown in the table below, a site-specific noise analysis shall be required to evaluate compliance with the Placer County Code Article 9.36 (Noise).

	Setback Required (ft)	
Event Activity	**Auburn/Bowman CPA**	**Other CPA's**
Amplified music/speech at event on 20+ acres	1,225	750
Amplified music/speech at event on 10 to less than 20	925	550
Amplified speech	450	275

Adjustments to County Exterior Noise Level Standards Based on Measured Ambient Conditions

The nearest off-site noise-sensitive land uses which would potentially be affected by the project consist of rural residential in all directions. The Placer County General Plan establishes exterior and interior noise level standards of 60 and 45 dB DNL (respectively) for residential uses affected by non-transportation noise sources, such as those proposed by project on-site operations (Table 7 of this report). However, footnote 2 of Table 7 states that where existing transportation noise levels exceed the non-transportation standards of Table 7, the allowable DNL shall be raised to the same level as that of the ambient level.

Section 9.36.060(2) of the Placer County Code establishes sound level limits for sensitive receptors exposed to non-transportation noise sources, such as those proposed by on-site project operations. Specifically, the County Code establishes hourly average and maximum noise level standards of 55 dB L_{eq} and 70 dB L_{max} (respectively) during daytime hours (7:00 a.m. to 10:00 p.m.). The County Code also establishes hourly average and maximum noise level standards of 45 dB L_{eq} and 65 dB L_{max} (respectively) during nighttime hours (10:00 p.m. to 7:00 a.m.). However, County Code Section 9.36.060(A) states that non-transportation noise sources shall not exceed the measured ambient noise level at the sensitive receptor by 5 dB or exceed the noise level standards specified above, whichever is greater.

As discussed previously, BAC conducted a long-term (96-hour) ambient noise level survey at four (4) locations from March 31st to April 3rd, 2022 (Table 3). Comparison of ambient noise level data contained in Table 3 and the Placer County General Plan and County Code non-transportation noise standards revealed that the County's criteria are being exceeded at the measurement sites, representative of the ambient noise level environment at the nearest residential uses. The nearest residences have been identified as receivers R-1 through R-11 on Figures 1 and 3. Based on the results from the BAC ambient noise survey, and pursuant to the General Plan and County Code adjustment criteria discussed above, the following exterior noise level standards shown in Tables 9 through 11 have been applied to project on-site noise sources and assessed at the nearest residential receivers.

Table 9
Placer County General Plan Exterior Noise Level Standards Applied to the Project

Residential Receiver	Representative Measurement Site	Measured Noise Level, DNL (dB)[1]	Unadjusted Noise Standard, DNL (dB)[2]	Adjusted for Ambient?	Applied Noise Standard, DNL (dB)[3]
R-1, R-2, R-3	1	70	50	Yes	70
R-4, R-5	4	61		Yes	61
R-6, R-7	3	52		Yes	52
R-8, R-9, R-10, R-11	2	54		Yes	54

[1] Lowest measured DNL at measurement sites during BAC noise survey.
[2] Unadjusted General Plan noise level standard applicable to residential uses.
[3] Applied noise standards based on BAC ambient noise survey and General Plan ambient noise adjustment criteria.

Table 10
Placer County Code Daytime Exterior Noise Level Standards Applied to the Project

Residential Receiver	Representative Measurement Site	Measured Noise Levels (dB)[1]		Unadjusted Noise Standards (dB)[2]		Adjusted for Ambient?		Applied Noise Standards (dB)[3]	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-1, R-2, R-3	1	62	70	55	70	Yes	Yes	67	75
R-4, R-5	4	62	75			Yes	Yes	67	80
R-6, R-7	3	49	67			No	Yes	55	72
R-8, R-9, R-10, R-11	2	54	71			Yes	Yes	59	76

[1] Lowest average measured hourly daytime noise levels at measurement sites during BAC noise survey.
[2] Unadjusted County Code daytime noise level standards applicable to sensitive receptors (residential).
[3] Applied daytime noise standards based on BAC ambient noise survey and County Code ambient noise adjustment criteria.

Table 11
Placer County Code Nighttime Exterior Noise Level Standards Applied to the Project

Residential Receiver	Representative Measurement Site	Measured Noise Levels (dB)[1]		Unadjusted Noise Standards (dB)[2]		Adjustment for Ambient?		Applied Noise Standards (dB)[3]	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-1, R-2, R-3	1	63	62	45	65	Yes	Yes	68	67
R-4, R-5	4	42	57			Yes	No	47	65
R-6, R-7	3	44	56			Yes	No	49	65
R-8, R-9, R-10, R-11	2	44	56			Yes	No	49	65

[1] Lowest average measured hourly nighttime noise levels at measurement sites during BAC noise survey.
[2] Unadjusted County Code nighttime noise level standards applicable to sensitive receptors (residential).
[3] Applied nighttime noise standards based on BAC ambient noise survey and County Code ambient noise adjustment criteria.

Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this assessment, a noise and vibration impact is considered significant if the project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or

- Generation of excessive groundborne vibration or groundborne noise levels; or

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The project site is not within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. Therefore, the last threshold listed above is not discussed further.

The following criteria based on standards established by the California Department of Transportation (Caltrans), Placer County General Plan and County Code were used to evaluate the significance of environmental noise and vibration resulting from the project:

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the Placer County General Plan or County Code.

- A significant impact would be identified if project-generated off-site traffic, on-site operations, or on-site construction activities would substantially increase noise levels at existing sensitive receptors in the vicinity. A substantial increase in off-site traffic noise level exposure would be identified relative to the FICON noise level increase significance criteria presented in Table 4.

  In terms of determining the temporary noise increase due to project on-site operations and construction activities, an impact would occur if those activities would noticeably increase ambient noise levels above background levels. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the analysis of project on-site operations and construction activity noise level increases, a noticeable increase in ambient noise levels is assumed to occur where those activities would result in an increase by 5 dB or more over existing ambient noise levels.

- A significant impact would be identified if project construction activities or proposed on-site operations would expose noise-sensitive receptors to excessive groundborne vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to these sources would exceed the Caltrans vibration impact criteria.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic

With development of the project, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. The FHWA Model was used with traffic input data from the project traffic consultant (KD Anderson & Associates, Inc.) to predict project traffic noise level increases relative to existing and cumulative project and no project conditions.

Impact 1: Increases in Existing Traffic Noise Levels due to the Project

Traffic data in the form of Weekday PM and Saturday Noon peak hour movements for existing conditions were obtained from KD Anderson & Associates, Inc. Average daily traffic volumes were conservatively estimated by applying a factor of 10 to peak hour conditions.

Existing versus Existing Plus Project traffic noise levels on the local roadway network are shown in Tables 12 and 13. The following section includes an assessment of predicted traffic noise levels relative to the FICON noise level increase significance criteria presented in Table 4. The data presented in Tables 12 and 13 are provided in terms of DNL at a standard distance of 100 feet from the centerlines of the project-area roadways. Appendix B contains the FWHA Model inputs.

It should be noted that in many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. It is also recognized that existing sensitive land uses within the project vicinity are located varying distances from the centerlines of the local roadway network. The 100-foot reference distance is utilized in this assessment to provide a reference position at which changes in existing traffic noise levels resulting from the project can be evaluated.

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Existing vs. Existing Plus Project Conditions – Weekday PM Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			E	E+P	Increase	
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	60.0	60.0	0.0	No
2		South	59.3	59.3	0.0	No
3		East	58.0	58.0	0.0	No
4		West	61.6	61.6	0.0	No
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	54.0	54.0	0.0	No
6		South	48.1	48.1	0.0	No
7		East	58.9	58.9	0.0	No
8		West	59.3	59.3	0.0	No
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	53.4	53.4	0.0	No
10		South	57.2	57.3	0.1	No
11		East	60.0	60.0	0.0	No
12		West	54.6	54.7	0.1	No
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	60.0	60.0	0.0	No

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Existing vs. Existing Plus Project Conditions – Weekday PM Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			E	E+P	Increase	
14		South	55.6	55.6	0.0	No
15		East	62.6	62.6	0.0	No
16		West	58.9	58.9	0.0	No
17	(5) Old State Hwy/Taylor Rd	North	38.3	38.3	0.0	No
18		South	57.6	57.6	0.0	No
19		East	61.0	61.0	0.0	No
20		West	56.1	56.1	0.0	No
21	(6) Taylor Rd/Callison Rd	North	60.0	60.1	0.1	No
22		South	60.0	60.1	0.1	No
23		East	--	--	--	--
24		West	49.1	51.3	2.2	No
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	40.9	41.5	0.6	No
27		East	48.5	50.9	2.4	No
28		West	48.8	51.2	2.4	No
29	(8) Project Dwy/Callison Rd	North	--	43.9	43.9	Yes
30		South	--	--	--	--
31		East	48.8	51.2	2.4	No
32		West	48.8	49.0	0.2	No
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	60.4	60.5	0.1	No
34		South	61.2	61.3	0.1	No
35		East	52.9	52.9	0.0	No
36		West	56.6	56.6	0.0	No
37	(10) Taylor Rd/Penryn Rd	North	61.5	61.6	0.1	No
38		South	59.7	59.7	0.0	No
39		East	59.0	59.1	0.1	No
40		West	33.5	33.5	0.0	No
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	59.6	59.7	0.1	No
42		South	60.8	60.8	0.0	No
43		East	58.7	58.7	0.0	No
44		West	58.1	58.1	0.0	No
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	60.8	60.8	0.0	No
46		South	60.2	60.2	0.0	No
47		East	45.1	45.1	0.0	No
48		West	59.0	59.0	0.0	No

Blank cell = no traffic data was provided

Source: FHWA-RD-77-108 with inputs from KDA. Appendix B contains FHWA Model inputs.

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Existing vs. Existing Plus Project Conditions – Saturday Noon Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			E	E+P	Increase	
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	58.3	58.3	0.0	No
2		South	58.0	58.0	0.0	No
3		East	57.5	57.5	0.0	No
4		West	60.6	60.6	0.0	No
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	52.2	52.2	0.0	No
6		South	47.4	47.4	0.0	No
7		East	57.9	57.9	0.0	No
8		West	58.0	58.0	0.0	No
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	53.1	53.1	0.0	No
10		South	58.1	58.1	0.0	No
11		East	59.4	59.5	0.1	No
12		West	53.5	53.6	0.1	No
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	59.5	59.6	0.1	No
14		South	55.5	55.5	0.0	No
15		East	62.1	62.1	0.0	No
16		West	58.0	58.1	0.1	No
17	(5) Old State Hwy/Taylor Rd	North	33.5	33.5	0.0	No
18		South	56.3	56.3	0.0	No
19		East	59.5	59.5	0.0	No
20		West	55.1	55.1	0.0	No
21	(6) Taylor Rd/Callison Rd	North	58.5	58.7	0.2	No
22		South	58.4	58.5	0.1	No
23		East	--	--	--	--
24		West	48.1	50.5	2.4	No
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	38.9	39.9	1.0	No
27		East	47.2	50.0	2.8	No
28		West	46.7	49.9	3.2	No
29	(8) Project Dwy/Callison Rd	North	--	43.4	43.4	Yes
30		South	--	--	--	--
31		East	46.7	49.8	3.1	No
32		West	46.7	47.0	0.3	No
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	59.0	59.1	0.1	No
34		South	60.4	60.5	0.1	No
35		East	52.3	52.3	0.0	No
36		West	56.1	56.1	0.0	No
37	(10) Taylor Rd/Penryn Rd	North	60.6	60.7	0.1	No
38		South	58.4	58.4	0.0	No
39		East	58.8	58.9	0.1	No
40		West	30.5	30.5	0.0	No
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	59.9	60.0	0.1	No
42		South	60.6	60.7	0.1	No
43		East	58.7	58.7	0.0	No
44		West	57.6	57.6	0.0	No

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Existing vs. Existing Plus Project Conditions – Saturday Noon Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB) E	E+P	Increase	Substantial Increase?
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	60.6	60.7	0.1	No
46		South	59.6	59.6	0.0	No
47		East	45.4	45.4	0.0	No
48		West	58.3	58.3	0.0	No

Blank cell = no traffic data was provided
Source: FHWA-RD-77-108 with inputs from KDA. Appendix B contains FHWA Model inputs.

As stated previously, the FHWA Model does not account for non-traffic ambient noise sources such as nearby wildlife or other anthropogenic noise sources within an area. Consideration of such sources typically results in higher ambient noise levels (i.e., existing no project) than those predicted by the FHWA Model alone.

As indicated in Tables 12 and 13, the proposed project's contribution to traffic noise level increases is predicted to exceed applicable FICON increase significance criteria along one roadway segment evaluated in the existing conditions analyses – segment 29, the primary access point to the facility located on the project parcel. Specifically, the traffic noise level increase along roadway segment 29 is calculated to range from 43.4 to 43.9 dB DNL.

As discussed above, baseline ambient conditions are considerably higher than baseline traffic noise levels alone. When project traffic noise generation is compared to the measured ambient day-night average (DNL) level along roadway segment 29 within the project area (calculated average of 54 dB DNL at site 3), no project-related traffic noise level increase is calculated to occur along the roadway segment. Rather, the project-generated traffic noise level along roadway segment 29 is calculated be less than the measured ambient noise level of 54 dB DNL and would result in a project-generated noise level increase of less than 1 dB DNL. This is a more accurate representation of actual project-related noise level increases along segment 29 than the "traffic-only" noise increases of 43.4 and 43.9 dB DNL shown in Tables 12 and 13, respectively. Thus, project-related increases in traffic noise levels would not substantially exceed measured ambient noise conditions along segment 29 relative to the applicable FICON criteria. Finally, although existing residential uses were not identified within 100 feet from the centerline of roadway segment 29 (located on the project parcel), it should be noted that the predicted Existing Plus Project traffic noise levels of approximately 43 to 44 dB DNL at 100 feet along the segment is well below the unadjusted Placer County General Plan exterior noise level standard of 60 dB DNL applicable to traffic noise affecting residential uses.

Based on the analysis presented above, including consideration of measured ambient noise conditions within the project area, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project (Existing versus Existing Plus Project) are identified as being ***less than significant***.

Impact 2: Increases in Cumulative Traffic Noise Levels due to the Project

Traffic data in the form of Weekday PM and Saturday Noon peak hour movements for cumulative conditions were obtained from KD Anderson & Associates, Inc. Average daily traffic volumes were conservatively estimated by applying a factor of 10 to peak hour conditions.

Cumulative versus Cumulative Plus Project traffic noise levels on the local roadway network are shown in Tables 14 and 15. The following section includes an assessment of predicted traffic noise levels relative to the FICON noise level increase significance criteria presented in Table 4. The data presented in Tables 14 and 15 are provided in terms of DNL at a standard distance of 100 feet from the centerlines of the project-area roadways. Appendix B contains the FWHA Model inputs.

It should be noted that in many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. It is also recognized that existing sensitive land uses within the project vicinity are located varying distances from the centerlines of the local roadway network. The 100-foot reference distance is utilized in this assessment to provide a reference position at which changes in cumulative traffic noise levels resulting from the project can be evaluated.

Table 14
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Cumulative vs. Cumulative Plus Project Conditions – Weekday PM Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			C	C+P	Increase	
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	60.7	60.7	0.0	No
2		South	60.4	60.4	0.0	No
3		East	59.9	59.9	0.0	No
4		West	62.6	62.6	0.0	No
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	55.8	55.8	0.0	No
6		South	50.3	50.3	0.0	No
7		East	60.6	60.6	0.0	No
8		West	61.0	61.0	0.0	No
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	55.2	55.2	0.0	No
10		South	59.0	59.1	0.1	No
11		East	61.7	61.7	0.0	No
12		West	56.4	56.5	0.1	No
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	61.8	61.8	0.0	No
14		South	57.4	57.4	0.0	No
15		East	64.4	64.4	0.0	No
16		West	60.7	60.7	0.0	No
17	(5) Old State Hwy/Taylor Rd	North	42.3	42.3	0.0	No
18		South	59.3	59.3	0.0	No
19		East	62.8	62.8	0.0	No
20		West	57.9	57.9	0.0	No
21	(6) Taylor Rd/Callison Rd	North	61.7	61.8	0.1	No
22		South	61.7	61.8	0.1	No

Table 14
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Cumulative vs. Cumulative Plus Project Conditions – Weekday PM Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			C	C+P	Increase	
23		East	--	--	--	--
24		West	51.2	52.7	1.5	No
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	43.5	43.9	0.4	No
27		East	50.0	51.8	1.8	No
28		West	50.8	52.5	1.7	No
29	(8) Project Dwy/Callison Rd	North	--	43.9	43.9	Yes
30		South	--	--	--	--
31		East	51.2	52.7	1.5	No
32		West	51.2	51.3	0.1	No
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	62.3	62.4	0.1	No
34		South	63.0	63.1	0.1	No
35		East	54.8	54.8	0.0	No
36		West	58.8	58.8	0.0	No
37	(10) Taylor Rd/Penryn Rd	North	63.2	63.3	0.1	No
38		South	61.4	61.4	0.0	No
39		East	60.8	60.9	0.1	No
40		West	40.5	40.5	0.0	No
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	61.4	61.5	0.1	No
42		South	62.6	62.6	0.0	No
43		East	60.5	60.5	0.0	No
44		West	59.9	59.9	0.0	No
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	62.6	62.6	0.0	No
46		South	62.0	62.0	0.0	No
47		East	47.3	47.3	0.0	No
48		West	60.8	60.8	0.0	No

Blank cell = no traffic data was provided
Source: FHWA-RD-77-108 with inputs from KDA. Appendix B contains FHWA Model inputs.

Table 15
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Cumulative vs. Cumulative Plus Project Conditions – Saturday Noon Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			C	C+P	Increase	
1	(1) Ophir Rd/Taylor Rd/I-80 WB Ramps	North	60.8	60.8	0.0	No
2		South	60.4	60.4	0.0	No
3		East	59.5	59.5	0.0	No
4		West	62.9	62.9	0.0	No
5	(2) Hillview Rd/SR 193/I-80 EB Ramps	North	54.0	54.0	0.0	No
6		South	49.6	49.6	0.0	No
7		East	59.6	59.6	0.0	No
8		West	59.7	59.7	0.0	No

Table 15
Traffic Noise Modeling Results and Project-Related Traffic Noise Level Increases
Cumulative vs. Cumulative Plus Project Conditions – Saturday Noon Peak Hour Inputs

Seg.	Intersection	Direction	Traffic Noise Level at 100 feet, DNL (dB)			Substantial Increase?
			C	C+P	Increase	
9	(3) Old State Hwy/Newcastle Rd/I-80 WB Ramps	North	54.8	54.8	0.0	No
10		South	59.8	59.8	0.0	No
11		East	61.1	61.1	0.0	No
12		West	55.2	55.3	0.1	No
13	(4) Newcastle Rd/I-80 EB Ramps/Indian Hill Rd	North	61.3	61.3	0.0	No
14		South	57.3	57.3	0.0	No
15		East	63.9	63.9	0.0	No
16		West	59.8	59.9	0.1	No
17	(5) Old State Hwy/Taylor Rd	North	41.5	41.5	0.0	No
18		South	58.1	58.1	0.0	No
19		East	61.3	61.3	0.0	No
20		West	56.9	56.9	0.0	No
21	(6) Taylor Rd/Callison Rd	North	60.2	60.3	0.1	No
22		South	60.1	60.2	0.1	No
23		East	--	--	--	--
24		West	50.0	51.7	1.7	No
25	(7) Sisley Rd/Callison Rd	North	--	--	--	--
26		South	42.2	42.7	0.5	No
27		East	49.6	51.4	1.8	No
28		West	49.1	51.2	2.1	No
29	(8) Project Dwy/Callison Rd	North	--	43.4	43.4	Yes
30		South	--	--	--	--
31		East	48.5	50.8	2.3	No
32		West	48.5	48.7	0.2	No
33	(9) Taylor Rd/English Colony/Rock Springs Rd	North	60.7	60.8	0.1	No
34		South	62.2	62.3	0.1	No
35		East	54.2	54.2	0.0	No
36		West	57.8	57.8	0.0	No
37	(10) Taylor Rd/Penryn Rd	North	62.4	62.5	0.1	No
38		South	60.2	60.2	0.0	No
39		East	60.5	60.6	0.1	No
40		West	37.5	37.5	0.0	No
41	(11) Penryn Rd/Boyington Rd/I-80 WB Ramps	North	61.6	61.7	0.1	No
42		South	62.4	62.4	0.0	No
43		East	60.5	60.5	0.0	No
44		West	59.4	59.4	0.0	No
45	(12) Penryn Rd/I-80 EB Ramps/Boulder Creek	North	62.4	62.4	0.0	No
46		South	61.3	61.3	0.0	No
47		East	47.3	47.3	0.0	No
48		West	60.0	60.0	0.0	No

Blank cell = no traffic data was provided

Source: FHWA-RD-77-108 with inputs from KDA. Appendix B contains FHWA Model inputs.

As indicated in Tables 14 and 15, the proposed project's contribution to traffic noise level increases is predicted to exceed applicable FICON increase significance criteria along one roadway segment evaluated in the existing conditions analyses – segment 29, the primary access point to the facility located on the project parcel. Specifically, the traffic noise level increase along roadway segment 29 is calculated to range from 43.4 to 43.9 dB DNL.

Cumulative no project noise levels with consideration of ambient conditions would be considerably higher than cumulative plus project traffic noise levels alone. Assuming a cumulative no project ambient noise level of 56 dB DNL at the project site, which includes an increase of 2 dB DNL relative to the average measured ambient noise levels at site 3 at the project site (equivalent to a 50% increase in traffic volumes relative to existing traffic conditions in the area), no project-related traffic noise level increases are calculated to occur along roadway segment 29. Rather, cumulative plus project traffic noise levels along roadway segment 29 is calculated be less than the estimated cumulative no project conditions noise level of 56 dB DNL at the project site and would result in project-generated noise level increases of less than 1 dB. This is a more accurate representation of actual project-related noise level increases than the "traffic-only" noise increases of 43.4 and 43.9 dB DNL shown in Tables 14 and 15, respectively. Thus, project-related increases in traffic noise levels would not substantially exceed estimated cumulative no project conditions along segment 29 relative to the applicable FICON criteria. Further, although residences were not identified within 100 feet from segment 29, it should be noted that the cumulative plus project traffic noise levels of approximately 43 and 44 dB DNL at a distance of 100 feet along that segment are well below the Placer County General Plan exterior noise level standard of 60 dB DNL applicable to traffic noise affecting residential uses.

Based on the analysis presented above, including consideration of measured ambient noise conditions within the project area, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project (Cumulative versus Cumulative Plus Project) are identified as being ***less than significant***.

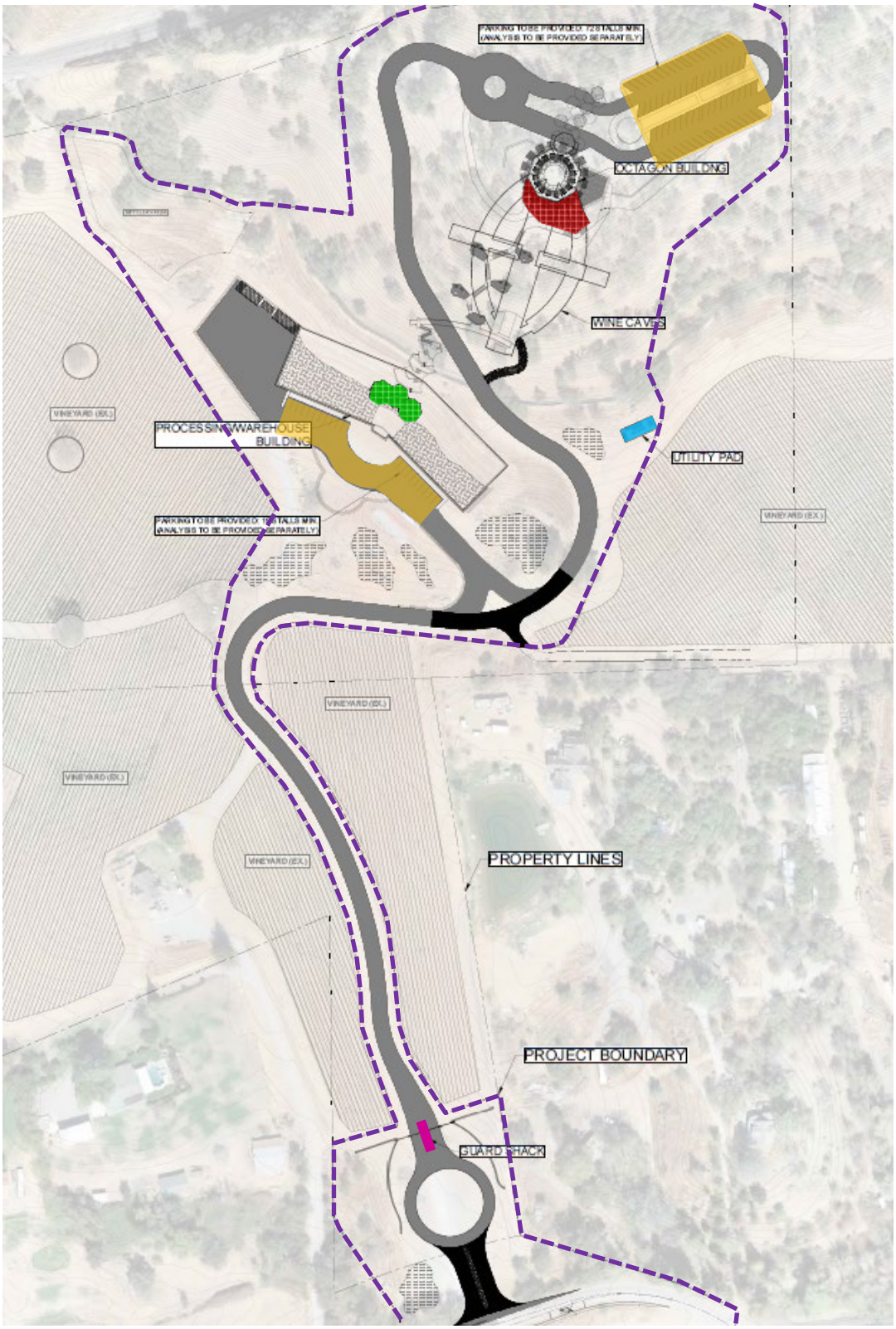
Off-Site Noise Impacts Associated with Proposed Winery Operations

The proposed winery operations include the development and operation of a tasting room, accessory restaurant, and associated facilities (e.g., parking areas). The proposed winery operations also include holding agricultural promotional events and special events as part of a conditional use permit.

The primary noise sources associated with proposed winery operations have been identified as parking area movements, on-site vehicle circulation, amplified music/speech, crowd conversation, and a standby emergency generator. The project site plan, provided as Figure 4, shows the proposed locations of facility components on the project property. An assessment of each project-related noise source at the nearest existing residential uses follows.

For noise generated by on-site activities, the Placer County General Plan and County Code noise level standards provided in Tables 9-11 were applied to the project. The County noise level limits are to be assessed at the property lines of receiving uses. In terms of determining the noise level increase due to on-site noise sources, an impact would occur if those sources would noticeably increase ambient noise levels above background levels. The threshold of perception of the

human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the following analyses of on-site noise sources, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels at existing residential uses.



Legend

- Project Area Boundary
- Octagon Building Outdoor Terrace
- Warehouse Building Roof Terrace
- Parking Areas
- Utility Pad
- Guard Shack

N

Scale (Feet)

0 100 200

Project 8 Winery

Placer County, California

Project Site Plan

Figure 4

BOLLARD Acoustical Consultants

Impact 3: Parking Area Noise at Nearest Residential Uses

The project proposes the development of two primary parking areas – one located on the north end of the property by the Octagon Building, and one centrally located adjacent to the Warehouse Building. The locations of the proposed parking areas are shown on Figure 4. The following analysis of project parking area noise exposure conservatively assumes worst-case parking activities that could occur on the property. Based on information contained in the project description, worst-case parking activity on the property would occur during an Agricultural Promotional Event or Special Event.

As a means of determining potential noise exposure due to project parking lot activities, Bollard Acoustical Consultants, Inc. (BAC) utilized specific parking lot noise level measurements conducted by BAC. Specifically, a series of individual noise measurements were conducted of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and persons conversing as they entered and exited the vehicles. The results of those measurements revealed that individual parking lot movements generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet. The maximum noise level associated with parking lot activity typically did not exceed 65 dB L_{max} at the same reference distance.

To compute hourly average (L_{eq}) noise levels generated by parking lot activities, the approximate number of hourly operations in any given area and distance to the effective noise center of those activities is required. Based on the project site plan, approximately 91 parking spaces stalls will be constructed on the property (Octagon Building – 72 spaces; Warehouse Building – 19 spaces). It was conservatively assumed for the purposes of this analysis that the Octagon Building and Warehouse Building parking areas could accommodate up to 75 and 25 spaces, respectively. It was further conservatively assumed that all stalls within the nearest parking areas to residential uses could fill or empty during a given peak hour (worst-case). The hourly average noise level generated by parking lot movements is computed using the following formula:

$$Peak\ Hour\ L_{eq} = 70+10*log\ (N) – 35.6$$

Where 70 is the mean Sound Exposure Level (SEL) for an automobile parking lot arrival or departure, N is the number of parking lot operations in a given hour, and 35.6 is 10 times the logarithm of the number of seconds in an hour. To calculate project parking activity noise generation relative to the Placer County General Plan day-night average (DNL) noise level criteria, it was conservatively assumed that worst-case peak hour parking activity could occur during every hour of an Agricultural Promotional Event on the property (i.e., 7:00 a.m. to 10:00 p.m.). Based on information contained in the project description, the facility does not propose operations during nighttime hours (10:00 p.m. to 7:00 a.m.).

Using the information provided above, the provided site plans (for scaling distances), and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project parking activity noise exposure at the property lines of the nearest existing residential uses (receivers R-1 through R-11) was calculated and the results of those calculations relative to the applicable Placer County General Plan and County Code noise level standards are summarized in Table 16.

Table 16
Predicted Worst-Case Parking Area Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2,3]			Applied County Standards (dB)[4]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	31	33	44	**70**	**67**	**75**
R-2	031-220-040	24	26	37	**70**	**67**	**75**
R-3	031-220-012	31	33	45	**70**	**67**	**75**
R-4	031-220-062	42	44	55	**61**	**67**	**80**
R-5	032-124-076	32	34	49	**61**	**67**	**80**
R-6	032-124-045	21	23	36	**52**	**55**	**72**
R-7	032-124-061	27	29	43	**52**	**55**	**72**
R-8	032-124-062	24	26	39	**54**	**59**	**76**
R-9	032-124-040	23	25	39	**54**	**59**	**76**
R-10	032-124-041	25	27	41	**54**	**59**	**76**
R-11	031-220-031	26	28	43	**54**	**59**	**76**

[1] Locations of residential receivers and property boundaries are illustrated on Figure 1.
[2] Predicted noise levels reflect activities from both parking areas combined/concurrently.
[3] Predicted noise levels include shielding offsets to account for intervening topography, where applicable.
[4] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Table 16, worst-case project parking area noise exposure is predicted to comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses by a wide margin. In addition, standard residential construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given this exterior to interior noise reduction typically achieved from standard residential construction and based on the predicted exterior noise levels in Table 16, project parking area noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the Table 16 data indicate that worst-case project parking noise level exposure is predicted to comply with the applied County Code exterior daytime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at the nearest existing residential uses by a wide margin.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus project parking noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Tables 17 through 19.

Table 17
Ambient Plus Project Parking Increases at Nearest Residential Uses – DNL

Residential Receiver	APN	Predicted Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Increase in Ambient, DNL (dB)[3]
R-1	031-220-041	31	70.0	<0.1
R-2	031-220-040	24	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	42	61.1	<0.1
R-5	032-124-076	32	61.0	<0.1
R-6	032-124-045	21	52.0	<0.1
R-7	032-124-061	27	52.0	<0.1
R-8	032-124-062	24	54.0	<0.1
R-9	032-124-040	23	54.0	<0.1
R-10	032-124-041	25	54.0	<0.1
R-11	031-220-031	26	54.0	<0.1

[1] Predicted noise levels from Table 16.
[2] Sum of predicted and measured ambient day-night average noise levels.
[3] Calculated increase in ambient day-night average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 18
Ambient Plus Project Parking Increases at Nearest Residential Uses – Daytime L_{eq}

Residential Receiver	APN	Predicted Noise Level, L_{eq} (dB)[1]	Ambient Plus Project, L_{eq} (dB)[2]	Increase in Ambient, L_{eq} (dB)[3]
R-1	031-220-041	33	62.0	<0.1
R-2	031-220-040	26	62.0	<0.1
R-3	031-220-012	33	62.0	<0.1
R-4	031-220-062	44	62.1	0.1
R-5	032-124-076	34	62.0	<0.1
R-6	032-124-045	23	49.0	<0.1
R-7	032-124-061	29	49.0	<0.1
R-8	032-124-062	26	54.0	<0.1
R-9	032-124-040	25	54.0	<0.1
R-10	032-124-041	27	54.0	<0.1
R-11	031-220-031	28	54.0	<0.1

[1] Predicted noise levels from Table 16.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 19
Ambient Plus Project Parking Increases at Nearest Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	44	70.0	<0.1
R-2	031-220-040	37	70.0	<0.1
R-3	031-220-012	45	70.0	<0.1
R-4	031-220-062	55	75.0	<0.1
R-5	032-124-076	49	75.0	<0.1
R-6	032-124-045	36	67.0	<0.1
R-7	032-124-061	43	67.0	<0.1
R-8	032-124-062	39	71.0	<0.1
R-9	032-124-040	39	71.0	<0.1
R-10	032-124-041	41	71.0	<0.1
R-11	031-220-031	43	71.0	<0.1

[1] Predicted noise levels from Table 16.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

As shown in Tables 17 through 19, the increases in ambient noise levels from worst-case project parking activities are calculated to be well below the applied significance criterion of 5 dB.

Because noise exposure from worst-case project parking movements is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 4: On-Site Vehicle Circulation Noise at Nearest Residential Uses

According to the project site plans, the primary vehicle access point to the project property will be located off Callison Road. Once on site, vehicles will travel north on a private road to the centrally located Warehouse Building and/or to the Octagon Building at the north end of the property. The location of the private road is shown on Figure 4. The following analysis of on-site vehicle circulation noise exposure conservatively assumes worst-case on-site vehicle circulation that could occur on the property. Based on the project description and provided project traffic data, worst-case on-site vehicle circulation on the property would occur during a Special Event.

The FHWA Model was utilized with daily trip generation data provided by the project traffic consultant (KD Anderson & Associates, Inc.) to quantify on-site traffic circulation noise levels at the nearest existing residential uses. As mentioned above, worst-case project trip generation is expected to occur during a Special Event on the property. Specifically, a Special Event is expected to generate approximately 80 peak hour trips during a worst-case busy PM peak hour. Based on the trip information above, the provided site plans (for scaling distances), and assuming an on-site vehicle speed of less than 25 mph (on the private road), project worst-case on-site

traffic circulation noise exposure at the property lines of the nearest residential uses was calculated. The results of those calculations are presented in Table 20.

To calculate project on-site traffic circulation noise generation relative to the General Plan day-night average (DNL) noise level criteria, the hours in which worst-case on-site vehicle circulation would occur must be known. According to the project description, the project proposes Special Events during the hours of 10:00 a.m. and 10:00 p.m.

Table 20
Predicted Worst-Case On-Site Vehicle Circulation Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	36	38	48	**70**	**67**	**75**
R-2	031-220-040	35	37	47	**70**	**67**	**75**
R-3	031-220-012	31	33	43	**70**	**67**	**75**
R-4	031-220-062	46	48	58	**61**	**67**	**80**
R-5	032-124-076	43	45	55	**61**	**67**	**80**
R-6	032-124-045	35	37	47	**52**	**55**	**72**
R-7	032-124-061	45	47	57	**52**	**55**	**72**
R-8	032-124-062	39	41	51	**54**	**59**	**76**
R-9	032-124-040	30	32	42	**54**	**59**	**76**
R-10	032-124-041	31	33	43	**54**	**59**	**76**
R-11	031-220-031	31	33	43	**54**	**59**	**76**

[1] Locations of residential receivers and property boundaries are illustrated on Figure 1.
[2] Predicted noise levels conservatively assume all vehicle trips occurring nearest to receivers. Predicted noise levels include shielding offsets to account for intervening topography, where applicable. Calculated DNL conservatively assumes PM peak hour vehicle trips occurring during every hour 10 a.m. to 10 p.m. Predicted Lmax noise levels conservatively assumed to be 10 dB higher than predicted hourly Leq.
[3] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

The Table 20 data indicate that worst-case project on-site vehicle circulation noise exposure is predicted to comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses by a wide margin. Further, based on the exterior to interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open), and based on the predicted exterior noise levels in Table 20, project on-site vehicle circulation noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the Table 20 data indicate that worst-case project on-site vehicle circulation noise level exposure is predicted to comply with the applied County Code exterior daytime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at the nearest existing residential uses.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus project on-site vehicle circulation noise level increases were

calculated at the nearest residential uses and the results of those calculations are presented in Tables 21 through 23.

Table 21
Ambient Plus Project On-Site Circulation Increases at Residential Uses – DNL

Residential Receiver	APN	Predicted Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Increase in Ambient, DNL (dB)[3]
R-1	031-220-041	36	70.0	<0.1
R-2	031-220-040	35	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	46	61.1	0.1
R-5	032-124-076	43	61.1	0.1
R-6	032-124-045	35	52.1	0.1
R-7	032-124-061	45	52.8	0.8
R-8	032-124-062	39	54.1	0.1
R-9	032-124-040	30	54.0	<0.1
R-10	032-124-041	31	54.0	<0.1
R-11	031-220-031	31	54.0	<0.1

[1] Predicted noise levels from Table 20.
[2] Sum of predicted and measured ambient day-night average noise levels.
[3] Calculated increase in ambient day-night average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 22
Ambient Plus Project On-Site Circulation Increases at Residential Uses – Daytime L_{eq}

Residential Receiver	APN	Predicted Noise Level, L_{eq} (dB)[1]	Ambient Plus Project, L_{eq} (dB)[2]	Increase in Ambient, L_{eq} (dB)[3]
R-1	031-220-041	38	62.0	<0.1
R-2	031-220-040	37	62.0	<0.1
R-3	031-220-012	33	62.0	<0.1
R-4	031-220-062	48	62.2	0.2
R-5	032-124-076	45	62.1	0.1
R-6	032-124-045	37	49.3	0.3
R-7	032-124-061	47	51.2	2.2
R-8	032-124-062	41	54.2	0.2
R-9	032-124-040	32	54.0	<0.1
R-10	032-124-041	33	54.0	<0.1
R-11	031-220-031	33	54.0	<0.1

[1] Predicted noise levels from Table 20.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 23
Ambient Plus Project On-Site Circulation Increases at Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	48	70.0	<0.1
R-2	031-220-040	47	70.0	<0.1
R-3	031-220-012	43	70.0	<0.1
R-4	031-220-062	58	75.1	0.1
R-5	032-124-076	55	75.0	<0.1
R-6	032-124-045	47	67.0	<0.1
R-7	032-124-061	57	67.4	0.4
R-8	032-124-062	51	71.0	<0.1
R-9	032-124-040	42	71.0	<0.1
R-10	032-124-041	43	71.0	<0.1
R-11	031-220-031	43	71.0	<0.1

[1] Predicted noise levels from Table 20.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Tables 21 through 23, the increases in ambient noise levels from worst-case project on-site vehicle circulation are calculated to be well below the applied significance criterion of 5 dB.

Because noise exposure from worst-case project on-site vehicle circulation is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because noise exposure from those activities is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 5: Outdoor Amplified Music at Nearest Residential Uses

According to the project description, outdoor activities are proposed to occur on the terrace outside the entry level of the Octagon Building, as well as on the roof terrace of the Warehouse Building. The locations of the proposed Octagon and Warehouse Buildings are shown on Figure 4. Amplified music/live speech will occasionally occur at these locations during outdoor activities to create ambiance. Proposed amplified music would include (but is not limited to) live, light music such as a string quartet, chamber group, or pianist played through a small single amplifier. Neither indoor nor outdoor concerts are proposed by the project. Finally, amplified music is proposed to occur only during the hours of 10:00 a.m. to 5:00 p.m. (events and tasting room hours) and 5:00 p.m. to 8:00 p.m. (events only).

To quantify the noise levels generated from project-generated amplified music/speech, BAC conducted short-term noise level measurements on Tuesday, March 29th, 2022, during a simulated event with amplified music. Larson Davis Laboratories Models LxT and 831 precision integrating sound level meters were used for the noise level measurements during the amplified

music simulation. The meters were calibrated before use and placed on a tripod 5 feet above ground at eight (8) locations, identified as sites A through H on Figure 5. The noise measurement locations were intended to quantify event music noise exposure at the nearest existing residential uses (receivers R-1 through R-11).

The sound system was set to produce sound levels typical or slightly above what would be produced by amplified music playing on the property, based on the types of music/speech included in the project description. The outdoor amplified music simulation utilized reference music levels of 70 dB L_{eq} (average) and 75 dB L_{max} (maximum) at 50 feet from the speakers. While music was being played, short-term noise level measurements were conducted at the reference positions in front of the speakers, as well as at sites A through H. Appendix C shows photographs of the sound system setup and measurement locations.

The results from the BAC amplified music simulation were utilized in combination with SoundPlan Version 8.2 noise prediction model to project amplified music/speech from proposed on-site locations where background/ambient music would be played. To account for shielding provided by intervening topography, elevation data for the entire study area were input to the SoundPlan model to create a 3-dimensional base map. Using aerial imagery and the project site plans, the SoundPlan model inputs for both hard surfaces, soft surfaces, and vegetated areas were applied.

The results from the SoundPlan model projections at the property lines of the nearest existing residential uses are summarized in Table 24 and are shown graphically in Figures 6 and 7 with noise contours. The results presented in Table 24 and shown in Figures 6 and 7 include consideration of amplified music/speech occurring at both proposed locations concurrently (Octagon Building and Warehouse Building terrace areas).

Table 24
Predicted Outdoor Amplified Music Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	32	25	31	**70**	**62**	**70**
R-2	031-220-040	<20	<20	<20	**70**	**62**	**70**
R-3	031-220-012	<20	<20	<20	**70**	**62**	**70**
R-4	031-220-062	37	31	36	**61**	**62**	**75**
R-5	032-124-076	47	40	45	**61**	**62**	**75**
R-6	032-124-045	39	33	37	**52**	**50**	**67**
R-7	032-124-061	46	39	44	**52**	**50**	**67**
R-8	032-124-062	43	36	41	**54**	**54**	**71**
R-9	032-124-040	43	37	42	**54**	**54**	**71**
R-10	032-124-041	44	37	43	**54**	**54**	**71**
R-11	031-220-031	42	35	40	**54**	**54**	**71**

[1] Locations of residential receivers and property boundaries are illustrated on Figure 1.
[2] Predicted noise levels include consideration of the results from the BAC simulation and SoundPlan modeling.
[3] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)



Legend

- Project Parcel Boundary (Approximate)
- UPRR Railroad Tracks
- Outdoor Amplified Music Simulation Measurement Sites
- Noise-Sensitive Receivers (Existing Residences)

N

Scale (Feet)

0 150 300

Project 8 Winery

Placer County, California

Outdoor Amplified Music Simulation Sites

Figure 5

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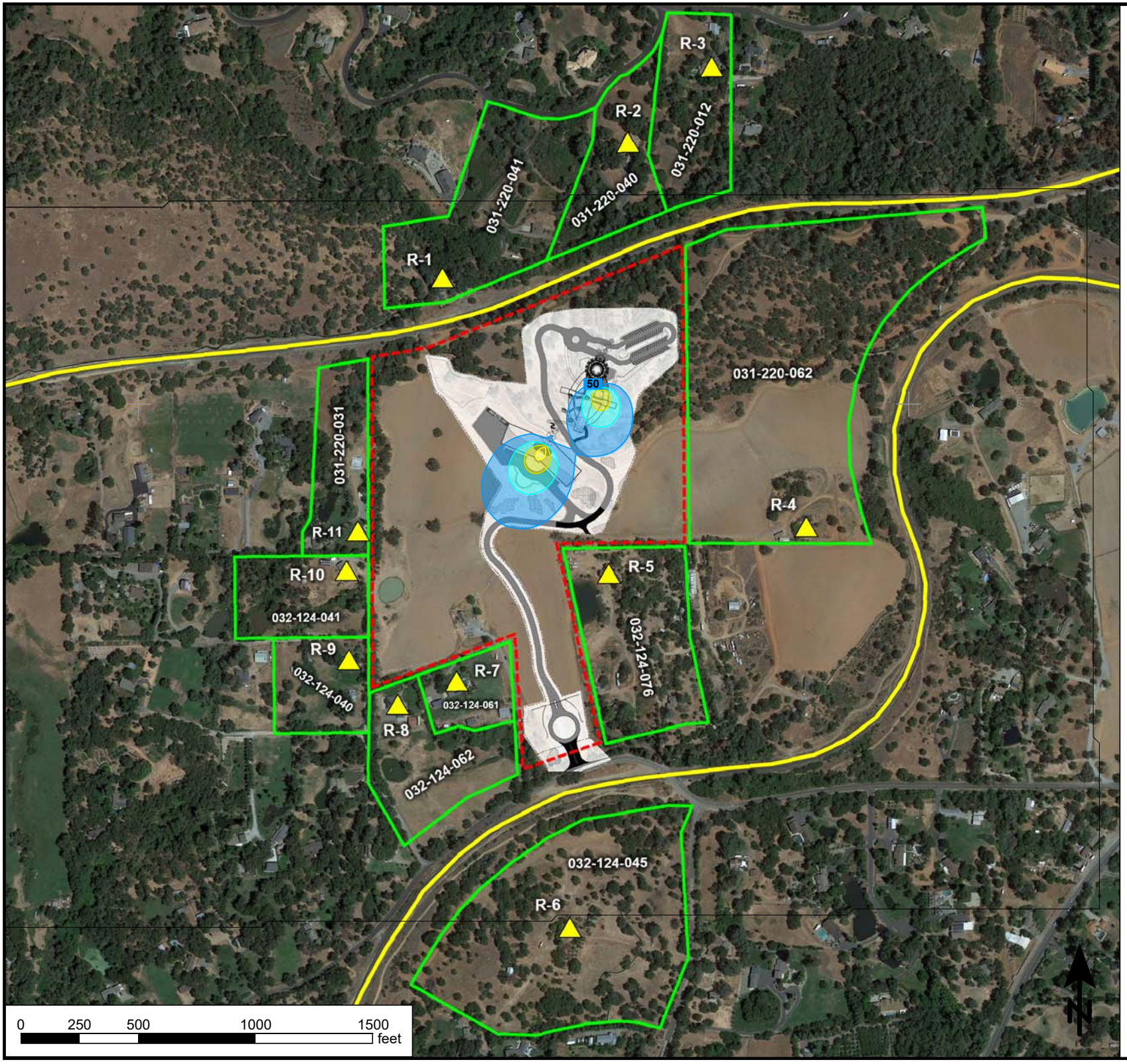


Figure 6

Project 8 Winery
Background Music
Noise Contours

Noise Contours

Daytime Leq, dB(A)
(based on reference sound level of 70 dBA Leq at 50 foot distance)

>=	80
75 -	80
70 -	75
65 -	70
60 -	65
55 -	60
50 -	55

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Acoustical Consultants

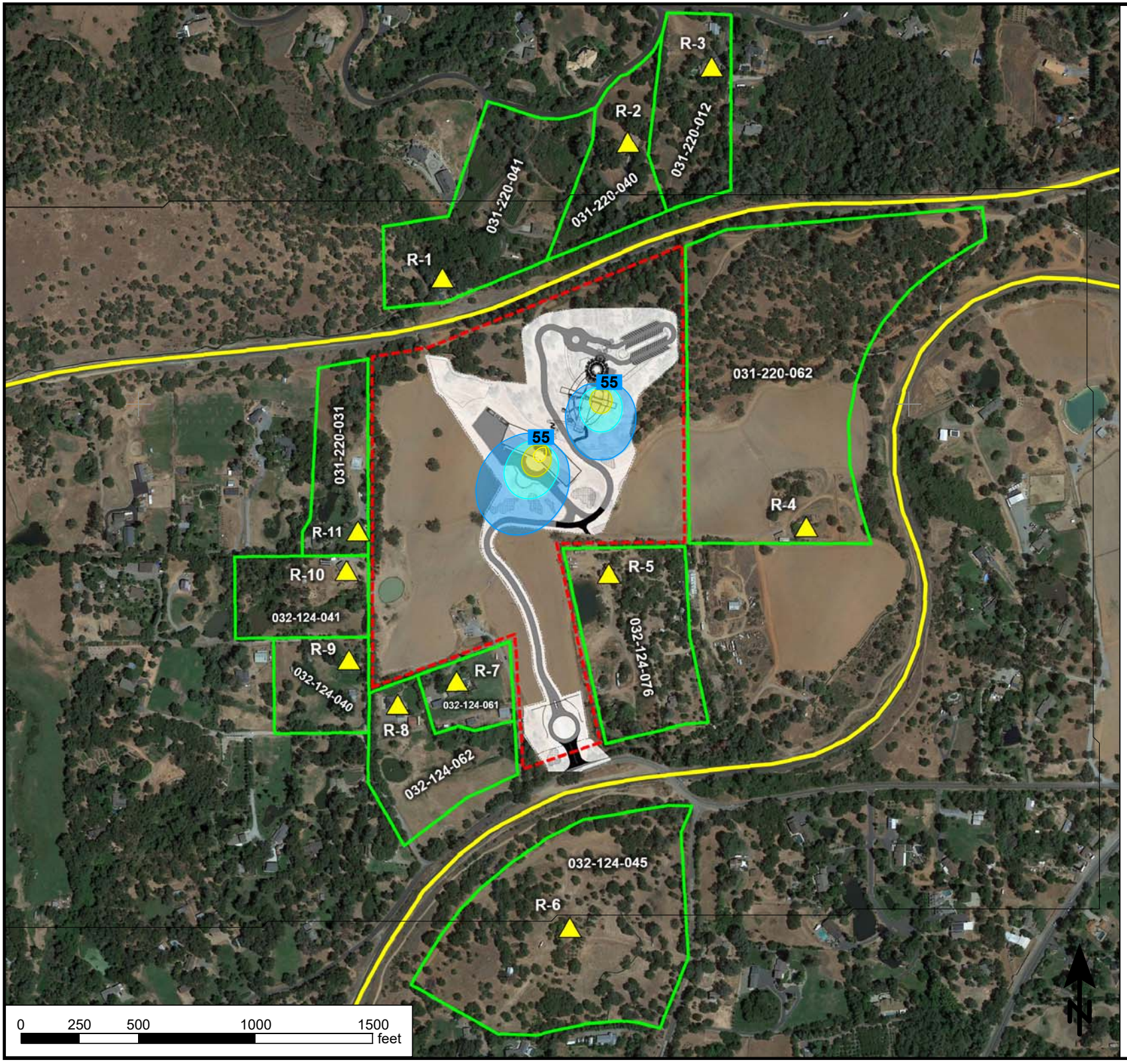


Figure 7

Project 8 Winery
Background Music
Noise Contours

Noise Contours

Daytime Lmax, dB(A)
(based on reference
sound level of 75 dBA
Lmax at 50 foot distance)

>=	85
80 -	85
75 -	80
70 -	75
65 -	70
60 -	65
55 -	60

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Acoustical Consultants

As indicated in Table 24, project outdoor amplified music noise exposure is predicted to comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses. In addition, standard residential construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given this exterior to interior noise reduction typically achieved from standard residential construction and based on the predicted exterior noise levels in Table 24, project outdoor amplified music noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the Table 24 data indicate that project outdoor amplified music noise level exposure is predicted to comply with the applied County Code exterior daytime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at the nearest existing residential uses. The predicted compliance with the applied General Plan and County Code noise level criteria identified above includes consideration of the County's 5 dB downward adjustment to standards for noise sources consisting primarily of music and speech.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus project amplified music noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Tables 25 through 27.

Table 25
Ambient Plus Project Amplified Music Increases at Nearest Residential Uses – DNL

Residential Receiver	APN	Predicted Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Increase in Ambient, DNL (dB)[3]
R-1	031-220-041	32	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	37	61.0	<0.1
R-5	032-124-076	47	61.2	0.2
R-6	032-124-045	39	52.2	0.2
R-7	032-124-061	46	52.9	0.9
R-8	032-124-062	43	54.3	0.3
R-9	032-124-040	43	54.4	0.4
R-10	032-124-041	44	54.4	0.4
R-11	031-220-031	42	54.2	0.2

[1] Predicted noise levels from Table 24.
[2] Sum of predicted and measured ambient day-night average noise levels.
[3] Calculated increase in ambient day-night average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 26
Ambient Plus Project Amplified Music at Nearest Residential Uses – Daytime L_{eq}

Residential Receiver	APN	Predicted Noise Level, L_{eq} (dB)[1]	Ambient Plus Project, L_{eq} (dB)[2]	Increase in Ambient, L_{eq} (dB)[3]
R-1	031-220-041	25	62.0	<0.1
R-2	031-220-040	<20	62.0	<0.1
R-3	031-220-012	<20	62.0	<0.1
R-4	031-220-062	31	62.0	<0.1
R-5	032-124-076	40	62.0	<0.1
R-6	032-124-045	33	49.1	0.1
R-7	032-124-061	39	49.4	0.4
R-8	032-124-062	36	54.1	0.1
R-9	032-124-040	37	54.1	0.1
R-10	032-124-041	37	54.1	0.1
R-11	031-220-031	35	54.1	0.1

[1] Predicted noise levels from Table 24.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 27
Ambient Plus Project Amplified Music Increases at Nearest Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	31	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	36	75.0	<0.1
R-5	032-124-076	45	75.0	<0.1
R-6	032-124-045	37	67.0	<0.1
R-7	032-124-061	44	67.0	<0.1
R-8	032-124-062	41	71.0	<0.1
R-9	032-124-040	42	71.0	<0.1
R-10	032-124-041	43	71.0	<0.1
R-11	031-220-031	40	71.0	<0.1

[1] Predicted noise levels from Table 24.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

As shown in Tables 25 through 27, the increases in ambient noise levels from project outdoor amplified music are calculated to be well below the applied significance criterion of 5 dB.

Because noise exposure from project outdoor amplified music is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because noise exposure from this source is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 6: Event Outdoor Crowd Noise at Nearest Residential Uses

According to the project description, the project proposes to host Agricultural Promotional Events and Special Events. The maximum capacity for project Agricultural Promotional Events would be limited to 75 people per event, and could occur during any day of the week between the hours of 7:00 a.m. to 10:00 p.m. The maximum capacity for project Special Events would be limited to 200 people per event and could occur during any day of the week between the hours of 10:00 a.m. to 10:00 p.m. The following analysis evaluates the noise generation potential of a worst-case large crowd of 200 persons (Special Event) at the two primary event function areas on the property – the Octagon and Warehouse Building areas.

To quantify event-generated crowd noise at nearby noise-sensitive receivers, BAC utilized reference file data for persons speaking in casual, normal, and raised voices (casual = 52 dB per person at 3 feet; normal voice = 57 dB per person at 3 feet; raised voice = 64 dB per person at 3 feet). Using the provided reference file data, conservatively assuming 50% of a 200 person crowd is conversing simultaneously (100 people speaking, 100 people listening), and assuming standard spherical spreading loss (-6 dB per doubling of distance), data were projected from the effective noise center of the two primary event function areas on the property (Octagon and Warehouse Buildings) to the property lines of the nearest existing residential uses (receivers R-1 through R-11). The results of those projections relative to the applicable Placer County General Plan and County Code noise level standards are summarized in Table 28.

Table 28
Predicted Worst-Case Event Crowd Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]			Applied County Standards (dB)[3]		
		DNL	L_{eq}	L_{max}	DNL	Daytime L_{eq}	Daytime L_{max}
R-1	031-220-041	26	28	33	**70**	**62**	**70**
R-2	031-220-040	26	28	33	**70**	**62**	**70**
R-3	031-220-012	22	24	29	**70**	**62**	**70**
R-4	031-220-062	34	36	41	**61**	**62**	**75**
R-5	032-124-076	32	34	39	**61**	**62**	**75**
R-6	032-124-045	21	23	28	**52**	**50**	**67**
R-7	032-124-061	27	29	34	**52**	**50**	**67**
R-8	032-124-062	24	26	31	**54**	**54**	**71**
R-9	032-124-040	24	26	31	**54**	**54**	**71**
R-10	032-124-041	26	28	33	**54**	**54**	**71**
R-11	031-220-031	28	30	35	**54**	**54**	**71**

[1] Locations of residential receivers and property boundaries are illustrated on Figure 1.
[2] Predicted noise levels from a 200 person Special Event occurring at the nearest event area to the receiver. Predicted noise levels include shielding offsets to account for intervening topography, where applicable. Calculated DNL conservatively assumes crowd conversation occurring continuously throughout an entire 200 person Special Event (10:00 a.m. to 10:00 p.m.).
[3] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

The Table 28 data indicate that worst-case project crowd noise exposure is predicted to comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses by a wide margin. Further, based on the exterior to interior noise reduction typically achieved with standard residential construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open), and based on the predicted exterior noise levels in Table 28, project crowd noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the Table 28 data indicate that worst-case project crowd noise level exposure is predicted to comply with the applied County Code exterior daytime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at the nearest existing residential uses. The predicted compliance with the applied General Plan and County Code noise level criteria identified above includes consideration of the County's 5 dB downward adjustment to standards for noise sources consisting primarily of music and speech.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus project crowd noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Tables 29 through 31.

Table 29
Ambient Plus Project Event Crowd Noise Increases at Residential Uses – DNL

Residential Receiver	APN	Predicted Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Increase in Ambient, DNL (dB)[3]
R-1	031-220-041	26	70.0	<0.1
R-2	031-220-040	26	70.0	<0.1
R-3	031-220-012	22	70.0	<0.1
R-4	031-220-062	34	61.0	<0.1
R-5	032-124-076	32	61.0	<0.1
R-6	032-124-045	21	52.0	<0.1
R-7	032-124-061	27	52.0	<0.1
R-8	032-124-062	24	54.0	<0.1
R-9	032-124-040	24	54.0	<0.1
R-10	032-124-041	26	54.0	<0.1
R-11	031-220-031	28	54.0	<0.1

[1] Predicted noise levels from Table 28.
[2] Sum of predicted and measured ambient day-night average noise levels.
[3] Calculated increase in ambient day-night average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 30
Ambient Plus Project Event Crowd Noise Increases at Residential Uses – Daytime L_{eq}

Residential Receiver	APN	Predicted Noise Level, L_{eq} (dB)[1]	Ambient Plus Project, L_{eq} (dB)[2]	Increase in Ambient, L_{eq} (dB)[3]
R-1	031-220-041	28	62.0	<0.1
R-2	031-220-040	28	62.0	<0.1
R-3	031-220-012	24	62.0	<0.1
R-4	031-220-062	36	62.0	<0.1
R-5	032-124-076	34	62.0	<0.1
R-6	032-124-045	23	49.0	<0.1
R-7	032-124-061	29	49.0	<0.1
R-8	032-124-062	26	54.0	<0.1
R-9	032-124-040	26	54.0	<0.1
R-10	032-124-041	28	54.0	<0.1
R-11	031-220-031	30	54.0	<0.1

[1] Predicted noise levels from Table 28.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 31
Ambient Plus Project Event Crowd Noise Increases at Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	33	70.0	<0.1
R-2	031-220-040	33	70.0	<0.1
R-3	031-220-012	29	70.0	<0.1
R-4	031-220-062	41	75.0	<0.1
R-5	032-124-076	39	75.0	<0.1
R-6	032-124-045	28	67.0	<0.1
R-7	032-124-061	34	67.0	<0.1
R-8	032-124-062	31	71.0	<0.1
R-9	032-124-040	31	71.0	<0.1
R-10	032-124-041	33	71.0	<0.1
R-11	031-220-031	35	71.0	<0.1

[1] Predicted noise levels from Table 28.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Tables 29 through 31, the increases in ambient noise levels from worst-case project crowd conversation are calculated to be well below the applied significance criterion of 5 dB.

Because noise levels from worst-case project event crowds is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because noise exposure from that source is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 7: Emergency Generator Noise at Nearest Residential Uses

According to the project description, the project proposes the installation of an emergency stand-by generator at a utility pad on the property. The location of the proposed utility pad is shown in Figure 4. It is the understanding of BAC that the project proposes the installation of an MQ Power WhisperWatt 600 diesel generator at the utility pad. According to the equipment manufacturer, the proposed generator has a reference sound level of 71 dB at a distance of 23 feet.

The generator proposed at this site would only operate during emergencies (i.e., power outages). Excluding emergency operation, it is the experience of BAC in noise studies for similar emergency generators that operation of the equipment typically occurs for brief daytime periods for periodic maintenance/lubrication (i.e., approximately 15 minutes or less). For the purposes of this analysis, it is reasonable to assume that operation of the project generator for emergency purposes would be exempt from County noise level exposure. Because normal operation of the project generator is expected to periodically occur for brief daytime periods only (testing and maintenance), and because project generator noise is reasonably assumed to be exempt during

emergency operations, project emergency generator noise was assessed relative to the County Code's maximum (L_{max}) daytime noise level standard. To calculate project generator noise relative to the General Plan DNL noise level standard, the generator was assumed to be operating continuously for a one-hour period during daytime hours for routine testing and maintenance (believed to be conservative).

Based on the information above, the provided site plans (for scaling distances), and assuming standard spherical spreading loss (-6 dB per doubling of distance), project emergency generator noise exposure at the property lines of the nearest existing residential uses (receivers R-1 through R-11) was calculated and the results of those calculations relative to the applicable Placer County General Plan and County Code noise level standards are summarized in Table 32.

Table 32
Predicted Emergency Generator Noise Levels at Nearest Residential Uses

Residential Receiver[1]	APN	Predicted Noise Levels (dB)[2]		Applied County Standards (dB)[3]	
		DNL	L_{max}	DNL	Daytime L_{max}
R-1	031-220-041	<20	32	**70**	**75**
R-2	031-220-040	<20	32	**70**	**75**
R-3	031-220-012	<20	31	**70**	**75**
R-4	031-220-062	37	51	**61**	**80**
R-5	032-124-076	34	47	**61**	**80**
R-6	032-124-045	<20	30	**52**	**72**
R-7	032-124-061	21	34	**52**	**72**
R-8	032-124-062	<20	32	**54**	**76**
R-9	032-124-040	22	36	**54**	**76**
R-10	032-124-041	20	33	**54**	**76**
R-11	031-220-031	24	37	**54**	**76**

[1] Locations of residential receivers and property boundaries are illustrated on Figure 1.
[2] Calculated DNL conservatively assumes 1-hour of generator operation during a given daytime hour.
[3] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Table 32, project emergency generator noise exposure is predicted to comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses by a wide margin. In addition, standard residential construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given this exterior to interior noise reduction typically achieved from standard residential construction and based on the predicted exterior noise levels in Table 32, project generator noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the Table 32 data indicate that project emergency generator noise level exposure is predicted to comply with the applied County Code exterior daytime maximum (L_{max}) noise level standards at the nearest existing residential uses by a wide margin.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus project generator noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Tables 33 and 34.

Table 33
Ambient Plus Project Generator Noise Increases at Residential Uses – DNL

Residential Receiver	APN	Predicted Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Increase in Ambient, DNL (dB)[3]
R-1	031-220-041	<20	70.0	<0.1
R-2	031-220-040	<20	70.0	<0.1
R-3	031-220-012	<20	70.0	<0.1
R-4	031-220-062	37	61.0	<0.1
R-5	032-124-076	34	61.0	<0.1
R-6	032-124-045	<20	52.0	<0.1
R-7	032-124-061	21	52.0	<0.1
R-8	032-124-062	<20	54.0	<0.1
R-9	032-124-040	22	54.0	<0.1
R-10	032-124-041	20	54.0	<0.1
R-11	031-220-031	24	54.0	<0.1

[1] Predicted noise levels from Table 32.
[2] Sum of predicted and measured ambient day-night average noise levels.
[3] Calculated increase in ambient day-night average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 34
Ambient Plus Project Generator Noise Increases at Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	32	70.0	<0.1
R-2	031-220-040	32	70.0	<0.1
R-3	031-220-012	31	70.0	<0.1
R-4	031-220-062	51	75.0	<0.1
R-5	032-124-076	47	75.0	<0.1
R-6	032-124-045	30	67.0	<0.1
R-7	032-124-061	34	67.0	<0.1
R-8	032-124-062	32	71.0	<0.1
R-9	032-124-040	36	71.0	<0.1
R-10	032-124-041	33	71.0	<0.1
R-11	031-220-031	37	71.0	<0.1

[1] Predicted noise levels from Table 32.
[2] Sum of predicted and measured ambient daytime noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

The data provided in Tables 33 and 34 indicate that the increases in ambient noise levels from the project emergency generator are calculated to be well below the applied significance criterion of 5 dB.

Because noise exposure from the project emergency generator is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because generator noise exposure is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Impact 8: Cumulative (Combined) Project Noise Levels at Nearest Residential Uses

The calculated cumulative (combined) noise level exposure from analyzed on-site noise sources at the nearest existing residential uses (receivers R-1 through R-11) is presented in Tables 35 through 37. It should be noted that due to the logarithmic nature of the decibel scale, the sum of two noise values which differ by 10 dB equates to an overall increase in noise levels of 0.4 dB. When the noise sources are equivalent, the sum would result in an overall increase in noise levels of 3 dB.

Table 35
Calculated Cumulative On-Site Operations Noise Levels at Residential Uses – DNL

Residential Receiver	Predicted Noise Levels (dB), DNL					Calculated Cumulative, DNL (dB)[1]	Applied County Standard, DNL (dB)[2]
	Parking	Vehicle Circ.	Music	Crowd	Generator		
R-1	31	36	32	26	<20	38	**70**
R-2	24	35	<20	26	<20	36	**70**
R-3	31	31	<20	22	<20	34	**70**
R-4	42	46	37	34	37	48	**61**
R-5	32	43	47	32	34	49	**61**
R-6	21	35	39	21	<20	41	**52**
R-7	27	45	46	27	21	49	**52**
R-8	24	39	43	24	<20	44	**54**
R-9	23	31	43	24	22	44	**54**
R-10	25	31	44	26	23	44	**54**
R-11	26	31	42	28	24	42	**54**

[1] Calculated cumulative noise levels based on predicted noise levels presented in Impacts 3-7
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 36
Calculated Cumulative On-Site Operations Noise Levels at Residential Uses – Daytime L_{eq}

Residential Receiver	Predicted Noise Levels (dB), L_{eq}					Calculated Cumulative, L_{eq} (dB)[1]	Applied County Standard, L_{eq} (dB)[2]
	Parking	Vehicle Circ.	Music	Crowd	Generator		
R-1	33	38	25	28	--	39	**67**
R-2	26	37	<20	28	--	38	**67**
R-3	33	33	<20	24	--	36	**67**
R-4	44	48	31	36	--	50	**67**
R-5	34	45	40	34	--	47	**67**
R-6	23	37	33	23	--	39	**55**
R-7	29	47	39	29	--	48	**55**
R-8	26	41	36	26	--	43	**59**
R-9	25	32	37	26	--	38	**59**
R-10	27	33	37	28	--	39	**59**
R-11	28	33	35	30	--	38	**59**

[1] Calculated cumulative noise levels based on predicted noise levels presented in Impacts 3-7
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 37
Highest Predicted On-Site Operations Noise Levels at Residential Uses – Daytime L_{max}

Residential Receiver	Predicted Noise Levels (dB), L_{max}					Highest Maximum, L_{max} (dB)[1]	Applied County Standard, L_{max} (dB)[2]
	Parking	Vehicle Circ.	Music	Crowd	Generator		
R-1	44	48	31	33	32	48	**75**
R-2	37	47	<20	33	32	47	**75**
R-3	45	43	<20	29	31	45	**75**
R-4	55	58	36	41	51	58	**80**
R-5	49	55	45	39	47	55	**80**
R-6	36	47	37	28	30	47	**72**
R-7	43	57	44	34	34	57	**72**
R-8	39	51	41	31	32	51	**76**
R-9	39	42	42	31	36	42	**76**
R-10	41	43	43	33	37	43	**76**
R-11	43	43	40	35	37	43	**76**

[1] Highest predicted noise levels based on predicted noise levels presented in Impacts 3-7
[2] Applied noise standards based on BAC noise survey results and County adjustment criteria.
Source: Bollard Acoustical Consultants, Inc. (2022)

As indicated in Tables 35 through 37, the calculated cumulative (combined) noise level exposure from on-site operations would comply with the applied General Plan exterior day-night average noise level (DNL) standards at the property lines of the nearest existing residential uses. Further, based on the exterior to interior noise reduction typically achieved with standard residential

construction (i.e., approximately 25 dB with windows closed and approximately 15 dB with windows open), and based on the predicted exterior noise levels in Tables 35 through 37, combined project noise level exposure is expected to be well below the General Plan 45 dB DNL interior noise level standard within the interior areas of the nearest residences. Finally, the data provided in Tables 35 through 37 indicate that combined project noise level exposure is calculated to comply with the applied County Code exterior daytime hourly average (L_{eq}) and maximum (L_{max}) noise level standards at the nearest existing residential uses.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the lowest measured day-night average (DNL) and average measured hourly daytime noise levels presented in Table 3, ambient plus combined project noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Tables 38 through 40.

Table 38
Ambient Plus Combined Project Noise Increases at Residential Uses – DNL

Residential Receiver	Calculated Combined Noise Level, DNL (dB)[1]	Ambient Plus Project, DNL (dB)[2]	Overall Increase in Ambient, DNL (dB)[3]
R-1	38	70.0	<0.1
R-2	36	70.0	<0.1
R-3	34	70.0	<0.1
R-4	48	61.2	0.2
R-5	49	61.2	0.2
R-6	41	52.3	0.3
R-7	49	53.6	1.6
R-8	44	54.5	0.5
R-9	44	54.4	0.4
R-10	44	54.4	0.4
R-11	42	54.3	0.3

[1] Calculated combined noise levels from Table 35.
[2] Sum of calculated combined and measured ambient daytime noise levels.
[3] Calculated combined increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 39
Ambient Plus Combined Project Noise Increases at Residential Uses – Daytime L_{eq}

Residential Receiver	Calculated Combined Noise Level, L_{eq} (dB)[1]	Ambient Plus Project, L_{eq} (dB)[2]	Overall Increase in Ambient, L_{eq} (dB)[3]
R-1	39	62.0	<0.1
R-2	38	62.0	<0.1
R-3	36	62.0	<0.1
R-4	50	62.3	0.3
R-5	47	62.1	0.1
R-6	39	49.4	0.4
R-7	48	51.5	2.5
R-8	43	54.3	0.3
R-9	38	54.1	0.1
R-10	39	54.1	0.1
R-11	38	54.1	0.1

[1] Calculated combined noise levels from Table 36.
[2] Sum of calculated combined and measured ambient daytime average noise levels.
[3] Calculated combined increase in ambient daytime average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

Table 40
Ambient Plus Highest Predicted Project Noise Increases at Residential Uses – Daytime L_{max}

Residential Receiver	Highest Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Overall Increase in Ambient, L_{max} (dB)[3]
R-1	48	70.0	<0.1
R-2	47	70.0	<0.1
R-3	45	70.0	<0.1
R-4	58	75.1	0.1
R-5	55	75.0	<0.1
R-6	47	67.0	<0.1
R-7	57	67.4	0.4
R-8	51	71.0	<0.1
R-9	42	71.0	<0.1
R-10	43	71.0	<0.1
R-11	43	71.0	<0.1

[1] Calculated combined noise levels from Table 37.
[2] Sum of calculated combined and measured ambient daytime average noise levels.
[3] Calculated combined increase in ambient daytime average noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

The data provided in Tables 38 through 40 indicate that the increases in ambient noise levels from combined project on-site operations are calculated to be well below the applied significance criterion of 5 dB.

Because the calculated cumulative (combined) noise exposure from project on-site operations is predicted to satisfy applicable Placer County General Plan and County Code noise level standards at the nearest existing residential uses, and because cumulative noise exposure is not calculated to significantly increase ambient noise levels at those uses, this impact is identified as being ***less than significant***.

Off-Site Noise Impacts Associated with Proposed Agricultural Operations

According to the project description, the proposed agricultural operations include the development of a processing warehouse building that would support bottling, product storage, supply storage, equipment storage, and shipping/receiving with a fully-enclosed truck dock. The primary noise sources associated with on-site agricultural operations have been identified as on-site heavy truck passbys, loading dock operations, forklifts, and processing equipment within the Warehouse Building.

Operations associated with the growing, maintenance, and harvesting of grapes are already occurring within the project area. Noise sources associated with those existing on-site agricultural operations would include on-site heavy truck circulation and forklift usage activities. In addition, it is the understanding of BAC that all processing equipment and activities will be located within the Warehouse Building. Noise sources associated with processing include bottling equipment and crushing activities. Based on this information, the warehouse structure would provide a significant degree of interior to exterior sound attenuation of the interior-located processing equipment. It is our further understanding that the Warehouse Building loading dock will be fully-enclosed, which would significantly attenuate shipping/receiving activity noise levels.

Finally, pursuant to Placer County Code Section 9.36.030 (Exemptions), noise associated with agricultural operations on agricultural land which are carried out in any manner consistent with the practice and within the standards of the agricultural industry is exempt. For the purposes of this assessment, it is reasonably assumed that project on-site agricultural operations would occur pursuant to County Code Section 9.36.030 and would be exempt from County Code noise level compliance.

Pursuant to County Code Section 9.36.030, noise levels associated with proposed agricultural operations within the project area would be exempt from applicable Placer County noise level criteria. Additionally, based on the information above, which includes consideration of the significant sound attenuation that would be provided by the warehouse structure and fully-enclosed loading dock area, increases in ambient noise levels from project processing equipment and/or shipping/receiving activities are not expected at nearby residential receivers. As a result, this impact is identified as being ***less than significant***.

Noise Impacts Associated with Project On-Site Construction Activities

Impact 9: On-Site Infrastructure Construction Noise Levels at Residential Uses

The project includes the construction of a wine cave, utility pad, warehouse building, octagon building and guard shack. The locations of these proposed facilities are identified on Figure 4.

During on-site infrastructure construction, noise from heavy equipment operations would add to the noise environment in the immediate vicinity of the work area.

The proposed project construction schedule phasing is presented in Table 41. The estimated construction equipment usage by phase is shown in Table 42. Finally, the range of maximum noise levels for the estimated project construction equipment at full-power operation at a distance of 50 feet are presented in Table 43.

Table 41
Proposed Project Construction Schedule Phasing

Construction Phase	Timing and Duration
Utility Pad	Months 1 through 5 (5 months)
Wine Cave	Months 2 through 22 (21 months)
Warehouse Building	Months 6 through 23 (18 months)
Octagon Building	Months 8 through 23 (22 months)
Guard Shack	Months 14 through 17 (4 months)

Table 42
Estimated Heavy Equipment Usage in Project Construction Phase

		Construction Phase				
#	Equipment	Utility Pad	Wine Cave	Warehouse Building	Octagon Building	Guard Shack
1	Backhoe	X	X	X	X	X
2	Concrete mixer truck	X	X	X	X	X
3	Concrete pump truck	X	X	X	X	X
4	Crane			X	X	
5	Dozer	X	X	X	X	X
6	Excavator		X	X	X	
7	Grader			X	X	X
8	Loader		X	X	X	
9	Paver		X	X	X	
10	Saw			X	X	X
11	Truck	X	X	X	X	X

Table 43
Reference Noise Levels for Construction Equipment

#	Equipment Description	Reference Maximum Noise Level at 50 Feet, L_{max} (dB)
1	Backhoe	80
2	Concrete mixer truck	85
3	Concrete pump truck	82
4	Crane	83
5	Dozer	85
6	Excavator	85
7	Grader	85
8	Loader	80
9	Paver	85
10	Saw	76
11	Truck	84

Source: Federal Transit Administration Noise and Vibration Impact Assessment Manual, Table 7-1 (2018)

Based on the construction phasing and equipment sound level data presented in Tables 42 and 43, project construction equipment noise levels were predicted at the nearest existing residential uses (receivers R-1 through R-11). The results of those predictions are presented in Table 44.

Table 44
Summary of Predicted Construction Equipment Noise Levels at Nearest Residential Uses

	Predicted Highest Maximum Noise Levels at Receiver Locations, L_{max} (dB)[1]										
Phase	**R-1**	**R-2**	**R-3**	**R-4**	**R-5**	**R-6**	**R-7**	**R-8**	**R-9**	**R-10**	**R-11**
Utility Pad	60	60	59	72	68	56	60	57	57	58	58
Wine Cave	63	64	69	68	64	55	60	57	57	59	60
Warehouse Bldg.	65	62	66	67	71	56	62	58	59	61	64
Octagon Bldg.	67	67	69	69	62	54	59	56	56	57	59
Guard Shack	54	54	60	60	79	65	74	63	61	59	59

[1] Locations of residential receivers are shown on Figure 1.
Source: Bollard Acoustical Consultants, Inc. (2022)

It should be noted that Placer County Code Section 9.36.030(A)(7) exempts noise sources associated with construction activities provided such activities occur between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday provided, however, that all construction equipment is fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order. It is reasonably assumed for the purposes of this analysis that all noise-generating project construction equipment and activities would occur pursuant to County Code Section 9.36.030(A)(7) and would thereby be exempt from County Code noise level criteria.

However, noise from heavy equipment operations during on-site construction activities would add to the noise environment in the immediate vicinity of the work area. In terms of determining the

temporary noise increase due to project-related construction activities, an impact would occur if construction activity would noticeably increase ambient noise levels above background levels. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For this analysis, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels.

Table 3 of this report summarizes the results from the BAC long-term ambient noise survey. Using the highest average measured hourly daytime maximum (L_{max}) noise levels presented in Table 3, and the highest predicted construction equipment maximum noise levels at a given receiver shown Table 44, ambient plus project construction noise level increases were calculated at the nearest residential uses and the results of those calculations are presented in Table 45.

Table 45
Ambient Plus Project Construction Noise Increases at Residential Uses – Daytime L_{max}

Residential Receiver	APN	Predicted Noise Level, L_{max} (dB)[1]	Ambient Plus Project, L_{max} (dB)[2]	Increase in Ambient, L_{max} (dB)[3]
R-1	031-220-041	67	82.1	0.1
R-2	031-220-040	67	82.1	0.1
R-3	031-220-012	69	82.2	0.2
R-4	031-220-062	72	78.1	1.1
R-5	032-124-076	79	81.1	4.1
R-6	032-124-045	65	72.0	1.0
R-7	032-124-061	74	75.8	4.8
R-8	032-124-062	63	76.2	0.2
R-9	032-124-040	61	76.1	0.1
R-10	032-124-041	61	76.2	0.2
R-11	031-220-031	64	76.3	0.3

[1] Predicted highest maximum noise levels at a receiver from any phase from Table 44.
[2] Sum of predicted and highest average measured hourly daytime maximum noise levels.
[3] Calculated increase in ambient daytime noise levels.
Source: Bollard Acoustical Consultants, Inc. (2022)

The data provided in Table 45 indicate that the increases in ambient noise levels from on-site project construction activities are calculated to be below the applied significance criterion of 5 dB.

Based on the analysis and results provided above, this impact is identified as being ***less than significant***. Nonetheless, to the reduce the potential for annoyance at nearby noise-sensitive uses, the following measures should be incorporated into project on-site construction operations:

- Pursuant to County Code Section 9.36.030(A)(7), noise-generating on-site construction activities should occur between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday.
- Pursuant to County Code Section 9.36.030(A)(7), all noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.

- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
- Work area speed limits shall be established and enforced during the construction period.
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Vibration Impacts Associated with On-Site Project Operations

Impact 10: Vibration Generated by Project Construction and Facility Operations

As mentioned previously, the project proposes the construction of a wine cave, utility pad, warehouse building, octagon building and guard shack. The locations of these proposed facilities are identified on Figure 4. During on-site infrastructure construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest off-site sensitive structure has been identified as an existing residence, located approximately 150 feet from where construction activities would occur within the project area (receiver R-5).

Table 46 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. The Table 46 data also include projected equipment vibration levels at the nearest existing off-site sensitive structure (residence, receiver R-5) to the project area located approximately 150 feet away.

Table 46
Reference and Projected Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV at 25 Feet (in/sec)[1]	Projected PPV at Nearest Receptor (in/sec) Receiver R-2 (150 Feet)
Vibratory roller	0.210	0.014
Hoe ram	0.089	0.006
Large bulldozer	0.089	0.006
Caisson drilling	0.089	0.006
Loaded trucks	0.076	0.005
Jackhammer	0.035	0.002
Small bulldozer	0.003	<0.001

[1] PPV = Peak Particle Velocity

Source: 2018 FTA Transit Noise and Vibration Impact Assessment Manual (Table 7-4) and BAC calculations

The Table 46 data indicate that vibration levels generated from construction activities within the project area at the nearest existing residence located approximately 150 feet away are predicted to be well below the Caltrans thresholds for damage to residential structures of 0.5 in/sec PPV

shown in Table 5 (building structure vibration criteria). In addition, the projected equipment vibration levels in Table 46 are at or below a "barely/slightly perceptible" human response as defined by Caltrans in Table 6 (vibration annoyance potential threshold criteria). Based on the analysis provided above, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby off-site existing sensitive structures (residences).

During a site visit on March 29th, 2022, BAC staff noted that vibration levels were below the threshold of perception at all locations surrounding the project site and in the immediate project vicinity. However, during the passage of trains on the nearby UPRR tracks, it was noted that vibration levels within 100 feet of the tracks would be expected to be perceptible. The nearest proposed structures to the UPRR tracks have been identified as the Guard Shack and the Octagon Building, which are located in excess of 375 feet from the nearest railroad tracks. Given the setback from the railroad tracks, and because vibration levels dissipate rapidly with distance, it is expected that the project would not result in the exposure of persons to excessive groundborne vibration levels at proposed structures or uses within the project area.

Finally, the project consists of the development of a full-production winery that would include production facilities, a tasting room, an accessory restaurant, and associated facilities. It is the understanding of BAC that the project does not propose specific equipment that will produce appreciable vibration. Further, given the large setback from the proposed facilities, and because vibration levels dissipate rapidly with distance, vibration levels from facility operations are not expected to result in the exposure of persons to excessive groundborne vibration levels at existing off-site residential uses.

Because vibration levels due to and upon the proposed project are expected to satisfy the applicable Caltrans groundborne impact vibration criteria, this impact is identified as being ***less than significant***.

This concludes BAC's noise and vibration assessment of the Project 8 Winery project in Placer County, California. Please contact BAC at (530) 537-2328 or dariog@bacnoise.com if you have any comments or questions regarding this report.

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

Appendix B-1
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 01 Project Only - Weekday PM Peak Hour
Model Run Date: 6/30/2022

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	30	99	1	2	1	45	100
2		South	20	99	1	2	1	40	100
3		East	20	99	1	2	1	40	100
4		West	70	99	1	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North							
6		South							
7		East	20	99	1	2	1	45	100
8		West	20	99	1	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North							
10		South	150	99	1	2	1	45	100
11		East	140	99	1	2	1	40	100
12		West	290	99	1	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	140	99	1	2	1	40	100
14		South							
15		East	30	99	1	2	1	55	100
16		West	110	99	1	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North							
18		South							
19		East	70	99	1	2	1	40	100
20		West	70	99	1	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	360	99	1	2	1	45	100
22		South	240	99	1	2	1	45	100
23		East							
24		West	600	99	1	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	40	99	1	2	1	35	100
27		East	600	99	1	2	1	45	100
28		West	640	99	1	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North	680	99	1	2	2	25	100
30		South							
31		East	640	99	1	2	1	45	100
32		West	40	99	1	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	280	99	1	2	1	45	100
34		South	280	99	1	2	1	45	100
35		East							
36		West	40	99	1	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	280	99	1	2	1	45	100
38		South	40	99	1	2	1	45	100
39		East	240	99	1	2	1	45	100
40		West							
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	240	99	1	2	1	45	100
42		South	160	99	1	2	1	45	100
43		East	100	99	1	2	1	40	100
44		West							
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	160	99	1	2	1	45	100
46		South	90	99	1	2	1	45	100
47		East							
48		West	70	99	1	2	1	40	100

Appendix B-2
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 02 Project Only - Saturday Noon Peak Hour
Model Run Date: 6/30/2022

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	40	99	1	2	1	45	100
2		South	10	99	1	2	1	40	100
3		East	20	99	1	2	1	40	100
4		West	70	99	1	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North							
6		South							
7		East	10	99	1	2	1	45	100
8		West	10	99	1	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North							
10		South	50	99	1	2	1	45	100
11		East	220	99	1	2	1	40	100
12		West	270	99	1	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	220	99	1	2	1	40	100
14		South							
15		East	30	99	1	2	1	55	100
16		West	190	99	1	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North							
18		South							
19		East	60	99	1	2	1	40	100
20		West	60	99	1	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	340	99	1	2	1	45	100
22		South	200	99	1	2	1	45	100
23		East							
24		West	540	99	1	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	40	99	1	2	1	35	100
27		East	540	99	1	2	1	45	100
28		West	580	99	1	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North	600	99	1	2	2	25	100
30		South							
31		East	560	99	1	2	1	45	100
32		West	40	99	1	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	230	99	1	2	1	45	100
34		South	230	99	1	2	1	45	100
35		East							
36		West	20	99	1	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	240	99	1	2	1	45	100
38		South	30	99	1	2	1	45	100
39		East	210	99	1	2	1	45	100
40		West							
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	210	99	1	2	1	45	100
42		South	200	99	1	2	1	45	100
43		East	50	99	1	2	1	40	100
44		West							
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	190	99	1	2	1	45	100
46		South	80	99	1	2	1	45	100
47		East							
48		West	110	99	1	2	1	40	100

Appendix B-3
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 03 Existing - Weekday PM Peak Hour
Model Run Date: 6/30/2022

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	4,920	83	17	2	1	45	100
2		South	5,660	83	17	2	1	40	100
3		East	4,210	83	17	2	1	40	100
4		West	9,510	83	17	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North	1,670	83	17	2	1	40	100
6		South	430	83	17	2	1	40	100
7		East	3,840	83	17	2	1	45	100
8		West	5,600	83	17	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North	1,440	83	17	2	1	40	100
10		South	2,620	83	17	2	1	45	100
11		East	6,580	83	17	2	1	40	100
12		West	5,160	83	17	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	6,630	83	17	2	1	40	100
14		South	3,290	83	17	2	1	35	100
15		East	5,500	83	17	2	1	55	100
16		West	5,180	83	17	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North	120	83	17	1	1	25	100
18		South	5,140	83	17	2	1	35	100
19		East	8,340	83	17	2	1	40	100
20		West	3,680	83	17	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	4,930	83	17	2	1	45	100
22		South	4,910	83	17	2	1	45	100
23		East							
24		West	400	83	17	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	110	83	17	2	1	35	100
27		East	350	83	17	2	1	45	100
28		West	380	83	17	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North							
30		South							
31		East	380	83	17	2	1	45	100
32		West	380	83	17	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	5,420	83	17	2	1	45	100
34		South	6,500	83	17	2	1	45	100
35		East	1,740	83	17	2	1	35	100
36		West	4,100	83	17	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	6,960	83	17	2	1	45	100
38		South	4,590	83	17	2	1	45	100
39		East	3,970	83	17	2	1	45	100
40		West	40	83	17	1	1	25	100
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	4,530	83	17	2	1	45	100
42		South	6,030	83	17	2	1	45	100
43		East	4,900	83	17	2	1	40	100
44		West	3,200	83	17	2	1	45	100
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	6,010	83	17	2	1	45	100
46		South	5,250	83	17	2	1	45	100
47		East	570	83	17	1	1	25	100
48		West	5,250	83	17	2	1	40	100

Appendix B-4
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 04 Existing - Saturday Noon Peak Hour
Model Run Date: 6/30/2022

BOLLARD Acoustical

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	3,320	83	17	2	1	45	100
2		South	4,140	83	17	2	1	40	100
3		East	3,700	83	17	2	1	40	100
4		West	7,500	83	17	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North	1,100	83	17	2	1	40	100
6		South	360	83	17	2	1	40	100
7		East	3,040	83	17	2	1	45	100
8		West	4,140	83	17	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North	1,340	83	17	2	1	40	100
10		South	3,170	83	17	2	1	45	100
11		East	5,710	83	17	2	1	40	100
12		West	3,920	83	17	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	5,930	83	17	2	1	40	100
14		South	3,210	83	17	2	1	35	100
15		East	4,900	83	17	2	1	55	100
16		West	4,180	83	17	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North	40	83	17	1	1	25	100
18		South	3,850	83	17	2	1	35	100
19		East	5,920	83	17	2	1	40	100
20		West	2,910	83	17	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	3,480	83	17	2	1	45	100
22		South	3,400	83	17	2	1	45	100
23		East							
24		West	320	83	17	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	70	83	17	2	1	35	100
27		East	260	83	17	2	1	45	100
28		West	230	83	17	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North							
30		South							
31		East	230	83	17	2	1	45	100
32		West	230	83	17	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	3,900	83	17	2	1	45	100
34		South	5,470	83	17	2	1	45	100
35		East	1,550	83	17	2	1	35	100
36		West	3,640	83	17	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	5,750	83	17	2	1	45	100
38		South	3,430	83	17	2	1	45	100
39		East	3,760	83	17	2	1	45	100
40		West	20	83	17	1	1	25	100
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	4,800	83	17	2	1	45	100
42		South	5,660	83	17	2	1	45	100
43		East	4,940	83	17	2	1	40	100
44		West	2,860	83	17	2	1	45	100
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	5,720	83	17	2	1	45	100
46		South	4,510	83	17	2	1	45	100
47		East	610	83	17	1	1	25	100
48		West	4,480	83	17	2	1	40	100

Appendix B-5
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 05 Cumulative - Weekday PM Peak Hour
Model Run Date: 6/30/2022

BOLLARD Acoustical

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	5,800	83	17	2	1	45	100
2		South	7,200	83	17	2	1	40	100
3		East	6,450	83	17	2	1	40	100
4		West	11,950	83	17	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North	2,500	83	17	2	1	40	100
6		South	700	83	17	2	1	40	100
7		East	5,750	83	17	2	1	45	100
8		West	8,350	83	17	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North	2,200	83	17	2	1	40	100
10		South	3,900	83	17	2	1	45	100
11		East	9,850	83	17	2	1	40	100
12		West	7,750	83	17	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	9,900	83	17	2	1	40	100
14		South	4,950	83	17	2	1	35	100
15		East	8,250	83	17	2	1	55	100
16		West	7,800	83	17	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North	300	83	17	1	1	25	100
18		South	7,750	83	17	2	1	35	100
19		East	12,500	83	17	2	1	40	100
20		West	5,550	83	17	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	7,400	83	17	2	1	45	100
22		South	7,350	83	17	2	1	45	100
23		East							
24		West	650	83	17	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	200	83	17	2	1	35	100
27		East	500	83	17	2	1	45	100
28		West	600	83	17	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North							
30		South							
31		East	650	83	17	2	1	45	100
32		West	650	83	17	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	8,450	83	17	2	1	45	100
34		South	10,000	83	17	2	1	45	100
35		East	2,700	83	17	2	1	35	100
36		West	6,850	83	17	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	10,400	83	17	2	1	45	100
38		South	6,900	83	17	2	1	45	100
39		East	6,000	83	17	2	1	45	100
40		West	200	83	17	1	1	25	100
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	6,800	83	17	2	1	45	100
42		South	9,050	83	17	2	1	45	100
43		East	7,400	83	17	2	1	40	100
44		West	4,850	83	17	2	1	45	100
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	9,000	83	17	2	1	45	100
46		South	7,900	83	17	2	1	45	100
47		East	950	83	17	1	1	25	100
48		West	7,850	83	17	2	1	40	100

Appendix B-6
FHWA Highway Traffic Noise Prediction Model Data Inputs
Project 8 Winery
File Name: 06 Cumulative - Saturday Noon Peak Hour
Model Run Date: 6/30/2022

BOLLARD Acoustical

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Ophir Rd / Taylor Rd / I-80 WB Ramps	North	5,900	83	17	2	1	45	100
2		South	7,300	83	17	2	1	40	100
3		East	5,900	83	17	2	1	40	100
4		West	13,000	83	17	2	1	40	100
5	(2) Hillview Rd / SR 193 / I-80 EB Ramps	North	1,650	83	17	2	1	40	100
6		South	600	83	17	2	1	40	100
7		East	4,550	83	17	2	1	45	100
8		West	6,200	83	17	2	1	40	100
9	(3) Old State Hwy / Newcastle Rd / I-80 WB Ramps	North	2,000	83	17	2	1	40	100
10		South	4,700	83	17	2	1	45	100
11		East	8,500	83	17	2	1	40	100
12		West	5,800	83	17	1	1	25	100
13	(4) Newcastle Rd / I-80 EB Ramps / Indian Hill Rd	North	8,850	83	17	2	1	40	100
14		South	4,850	83	17	2	1	35	100
15		East	7,300	83	17	2	1	55	100
16		West	6,300	83	17	2	1	40	100
17	(5) Old State Hwy / Taylor Rd	North	250	83	17	1	1	25	100
18		South	5,800	83	17	2	1	35	100
19		East	8,900	83	17	2	1	40	100
20		West	4,450	83	17	2	1	35	100
21	(6) Taylor Rd / Callison Rd	North	5,200	83	17	2	1	45	100
22		South	5,100	83	17	2	1	45	100
23		East							
24		West	500	83	17	2	1	45	100
25	(7) Sisley Rd / Callison Rd	North							
26		South	150	83	17	2	1	35	100
27		East	450	83	17	2	1	45	100
28		West	400	83	17	2	1	45	100
29	(8) Project Dwy / Callsion Rd	North							
30		South							
31		East	350	83	17	2	1	45	100
32		West	350	83	17	2	1	45	100
33	(9) Taylor Rd / English Colony Rd / Rock Springs Rd	North	5,800	83	17	2	1	45	100
34		South	8,150	83	17	2	1	45	100
35		East	2,350	83	17	2	1	35	100
36		West	5,500	83	17	2	1	35	100
37	(10) Taylor Rd / Penryn Rd	North	8,600	83	17	2	1	45	100
38		South	5,200	83	17	2	1	45	100
39		East	5,600	83	17	2	1	45	100
40		West	100	83	17	1	1	25	100
41	(11) Penryn Rd / Boyington Rd / I-80 WB Ramps	North	7,200	83	17	2	1	45	100
42		South	8,550	83	17	2	1	45	100
43		East	7,450	83	17	2	1	40	100
44		West	4,300	83	17	2	1	45	100
45	(12) Penryn Rd / I-80 EB Ramps / Boulder Creek Rd	North	8,550	83	17	2	1	45	100
46		South	6,750	83	17	2	1	45	100
47		East	950	83	17	1	1	25	100
48		West	6,650	83	17	2	1	40	100









Legend

A: Site 1: Facing north towards noise meter, UPRR track and existing residence
B: Site 2: Facing southeast towards noise meter along project property line
C: Site 3: Facing southwest from meter at property line towards project property access point off Callison Road
D: Site 4: Facing west towards noise meter at project property line

Noise survey equipment

Project 8 Winery
Placer County, California

Photographs of Long-Term Noise Survey

Appendix C-1

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Legend

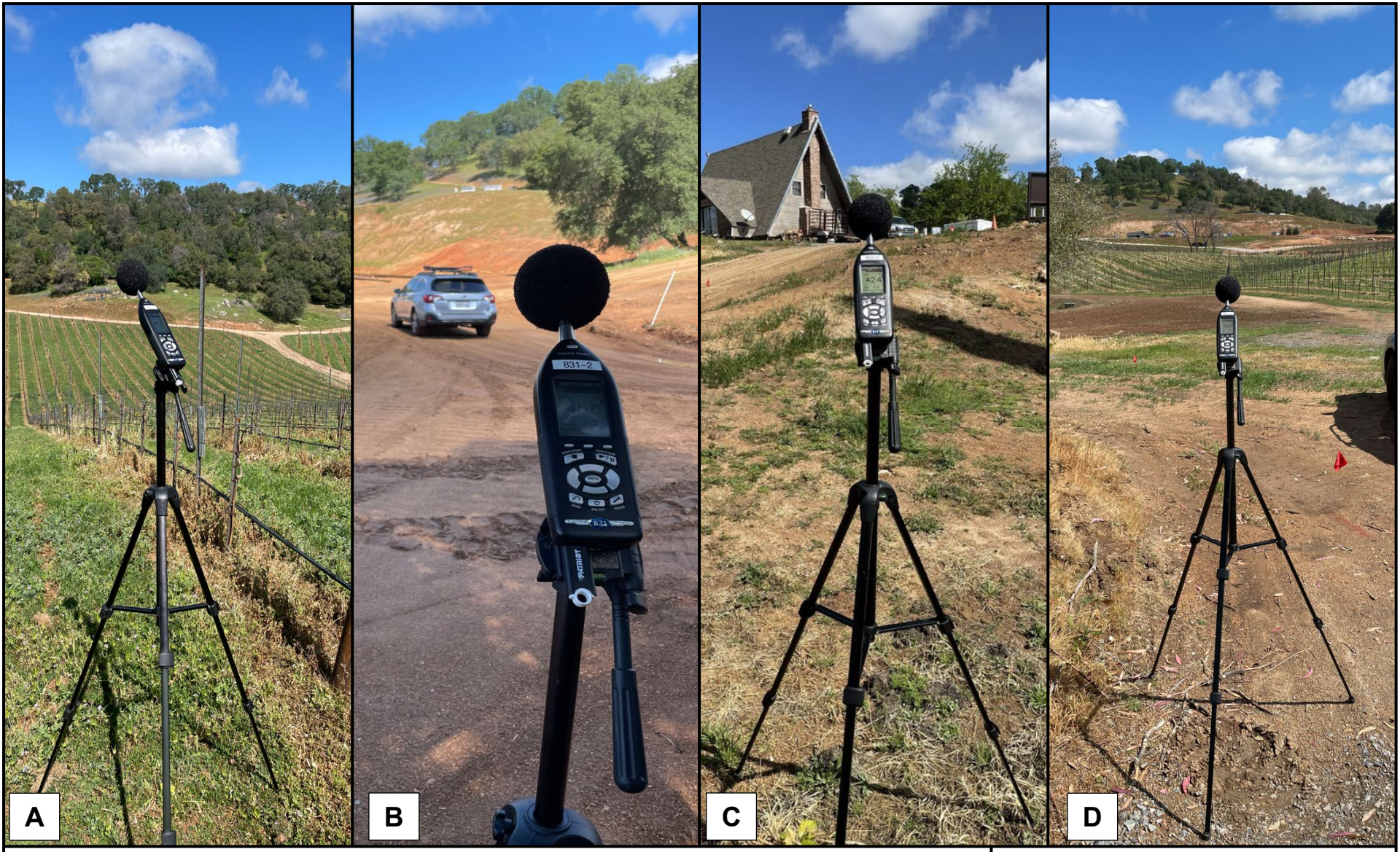
A: Warehouse building roof terrace music simulation location – facing northeast from reference meter to speakers on elevated hillside
B: Warehouse building roof terrace music simulation location – facing southwest from speakers on elevated hillside to reference meter
C: Site A: Facing southeast during warehouse building roof terrace music simulation
D: Site B: Facing south towards during warehouse building roof terrace music simulation

Project 8 Winery
Placer County, California

Photographs of Outdoor Music Simulation

Appendix C-2

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Legend

A: Site D: Facing northwest during warehouse building roof terrace music simulation
B: Site E: Facing north during warehouse building roof terrace music simulation
C: Site F: Facing northeast during warehouse building roof terrace music simulation
D: Site G: Facing northeast during warehouse building roof terrace music simulation

Project 8 Winery
Placer County, California

Photographs of Outdoor Music Simulation

Appendix C-3

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Legend

A: Site H: Facing east during warehouse building roof terrace music simulation

Project 8 Winery

Placer County, California

Photographs of Outdoor Music Simulation

Appendix C-4

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Legend

A: Octagon building terrace music simulation location – facing north from reference meter to elevated speakers
B: Octagon building terrace music simulation location – facing southwest from behind speakers

Project 8 Winery
Placer County, California

Photographs of Outdoor Music Simulation

Appendix C-5

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Appendix D-1
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Thursday, March 31, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	38	41	38	37
1:00 AM	37	39	37	36
2:00 AM	38	57	37	36
3:00 AM	36	40	37	36
4:00 AM	70	91	37	36
5:00 AM	58	88	37	36
6:00 AM	47	72	40	37
7:00 AM	72	95	45	41
8:00 AM	73	96	43	40
9:00 AM	44	56	42	39
10:00 AM	46	70	41	38
11:00 AM	60	87	42	38
12:00 PM	47	69	42	39
1:00 PM	71	95	45	39
2:00 PM	53	81	44	39
3:00 PM	51	78	40	37
4:00 PM	69	90	40	37
5:00 PM	60	88	38	37
6:00 PM	57	86	39	36
7:00 PM	56	62	54	39
8:00 PM	54	81	40	38
9:00 PM	70	94	39	38
10:00 PM	46	70	39	38
11:00 PM	68	88	38	37

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	73	44	67	70	36	63
Lmax (Maximum)	96	56	82	91	39	65
L50 (Median)	54	38	42	40	37	37
L90 (Background)	41	36	38	38	36	37

Computed DNL, dBA	70
% Daytime Energy	81%
% Nighttime Energy	19%

GPS Coordinates	38°52'16.15"N
	121°09'46.09"W

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Appendix D-2
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Friday, April 1, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	38	48	38	37
1:00 AM	43	67	38	36
2:00 AM	38	42	37	36
3:00 AM	74	95	40	37
4:00 AM	45	69	39	38
5:00 AM	59	88	39	38
6:00 AM	77	104	43	41
7:00 AM	74	98	45	43
8:00 AM	72	98	44	41
9:00 AM	43	56	42	39
10:00 AM	71	93	42	40
11:00 AM	59	87	43	40
12:00 PM	43	59	41	38
1:00 PM	46	67	42	39
2:00 PM	42	60	40	38
3:00 PM	73	94	42	38
4:00 PM	44	67	40	37
5:00 PM	60	87	40	38
6:00 PM	50	75	40	37
7:00 PM	58	89	41	39
8:00 PM	64	85	42	40
9:00 PM	74	94	43	40
10:00 PM	46	58	43	41
11:00 PM	45	60	42	39

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	74	42	68	77	38	69
Lmax (Maximum)	98	56	81	104	42	70
L50 (Median)	45	40	42	43	37	40
L90 (Background)	43	37	39	41	36	38

Computed DNL, dBA	76
% Daytime Energy	58%
% Nighttime Energy	42%

GPS Coordinates	38°52'16.15"N
	121°09'46.09"W

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Appendix D-3
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Saturday, April 2, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	42	58	39	38
1:00 AM	39	50	39	38
2:00 AM	40	51	38	37
3:00 AM	74	97	39	37
4:00 AM	39	53	39	38
5:00 AM	39	45	39	37
6:00 AM	42	62	41	39
7:00 AM	49	76	41	38
8:00 AM	59	87	40	38
9:00 AM	44	62	42	39
10:00 AM	49	75	43	39
11:00 AM	42	61	40	37
12:00 PM	75	96	40	38
1:00 PM	44	62	40	38
2:00 PM	43	60	39	37
3:00 PM	70	92	39	37
4:00 PM	58	85	38	36
5:00 PM	39	52	38	36
6:00 PM	49	77	37	36
7:00 PM	70	95	38	36
8:00 PM	45	56	45	41
9:00 PM	56	84	40	38
10:00 PM	64	90	40	38
11:00 PM	39	53	39	37

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	75	39	66	74	39	65
Lmax (Maximum)	96	52	75	97	45	62
L50 (Median)	45	37	40	41	38	39
L90 (Background)	41	36	38	39	37	38

Computed DNL, dBA	71
% Daytime Energy	67%
% Nighttime Energy	33%

GPS Coordinates	38°52'16.15"N
	121°09'46.09"W

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Appendix D-4
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Sunday, April 3, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	39	55	39	37
1:00 AM	66	87	39	37
2:00 AM	68	89	38	37
3:00 AM	69	92	38	36
4:00 AM	38	53	37	36
5:00 AM	69	94	37	36
6:00 AM	58	88	38	36
7:00 AM	50	72	39	37
8:00 AM	50	75	41	39
9:00 AM	59	85	41	39
10:00 AM	42	55	39	37
11:00 AM	62	91	39	37
12:00 PM	49	74	40	37
1:00 PM	41	57	38	36
2:00 PM	73	94	40	36
3:00 PM	45	63	38	36
4:00 PM	43	60	40	37
5:00 PM	39	58	37	35
6:00 PM	38	56	36	35
7:00 PM	59	87	41	37
8:00 PM	42	66	40	38
9:00 PM	44	52	43	42
10:00 PM	54	79	43	41
11:00 PM	61	89	41	39

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	73	38	62	69	38	65
Lmax (Maximum)	94	52	70	94	53	81
L50 (Median)	43	36	39	43	37	39
L90 (Background)	42	35	37	41	36	37

Computed DNL, dBA	71
% Daytime Energy	44%
% Nighttime Energy	56%

GPS Coordinates	38°52'16.15"N
	121°09'46.09"W

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Appendix D-5
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Thursday, March 31, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	43	50	40	34
1:00 AM	38	49	34	31
2:00 AM	36	48	34	30
3:00 AM	31	41	30	29
4:00 AM	45	61	31	29
5:00 AM	34	61	32	30
6:00 AM	47	69	40	33
7:00 AM	59	85	45	40
8:00 AM	59	85	44	39
9:00 AM	50	74	43	38
10:00 AM	64	86	46	40
11:00 AM	58	81	45	40
12:00 PM	59	85	47	42
1:00 PM	52	66	45	40
2:00 PM	56	77	43	38
3:00 PM	63	85	46	40
4:00 PM	51	77	42	37
5:00 PM	45	69	38	35
6:00 PM	46	68	38	34
7:00 PM	46	66	42	37
8:00 PM	54	69	54	52
9:00 PM	53	65	53	51
10:00 PM	51	68	51	40
11:00 PM	48	59	47	38

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	45	58	51	31	45
Lmax (Maximum)	86	65	76	69	41	56
L50 (Median)	54	38	45	51	30	38
L90 (Background)	52	34	40	40	29	33

Computed DNL, dBA	57
% Daytime Energy	97%
% Nighttime Energy	3%

GPS Coordinates	38°52'02.21"N
	121°09'47.30"W

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Appendix D-6
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Friday, April 1, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	43	51	39	37
1:00 AM	42	65	36	33
2:00 AM	37	47	36	34
3:00 AM	51	69	40	36
4:00 AM	52	76	40	37
5:00 AM	40	57	39	37
6:00 AM	52	72	45	41
7:00 AM	61	80	48	44
8:00 AM	56	77	47	43
9:00 AM	53	79	42	40
10:00 AM	50	69	42	38
11:00 AM	63	83	47	39
12:00 PM	51	76	40	37
1:00 PM	47	64	41	38
2:00 PM	51	71	41	37
3:00 PM	63	88	41	36
4:00 PM	57	79	38	35
5:00 PM	54	82	39	35
6:00 PM	58	84	40	36
7:00 PM	46	68	42	39
8:00 PM	51	55	51	50
9:00 PM	59	79	52	50
10:00 PM	50	55	50	46
11:00 PM	46	63	42	40

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	63	46	58	52	37	48
Lmax (Maximum)	88	55	76	76	47	62
L50 (Median)	52	38	43	50	36	41
L90 (Background)	50	35	40	46	33	38

Computed DNL, dBA	58
% Daytime Energy	94%
% Nighttime Energy	6%

GPS Coordinates	38°52'02.21"N
	121°09'47.30"W

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Appendix D-7
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Saturday, April 2, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	41	61	40	37
1:00 AM	38	49	37	35
2:00 AM	41	53	39	36
3:00 AM	49	68	39	35
4:00 AM	40	58	38	35
5:00 AM	40	59	39	37
6:00 AM	44	62	42	39
7:00 AM	60	85	41	38
8:00 AM	58	80	41	38
9:00 AM	46	65	40	38
10:00 AM	58	83	46	41
11:00 AM	50	71	45	40
12:00 PM	55	76	46	41
1:00 PM	54	79	45	39
2:00 PM	54	79	46	40
3:00 PM	50	63	46	40
4:00 PM	48	65	45	39
5:00 PM	46	72	40	35
6:00 PM	49	77	37	34
7:00 PM	46	67	38	33
8:00 PM	49	59	49	45
9:00 PM	50	54	50	48
10:00 PM	48	62	47	37
11:00 PM	45	55	46	36

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	60	46	54	49	38	44
Lmax (Maximum)	85	54	72	68	49	58
L50 (Median)	50	37	44	47	37	41
L90 (Background)	48	33	39	39	35	36

Computed DNL, dBA	54
% Daytime Energy	94%
% Nighttime Energy	6%

GPS Coordinates	38°52'02.21"N
	121°09'47.30"W

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Appendix D-8
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Sunday, April 3, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	40	57	37	34
1:00 AM	56	82	38	34
2:00 AM	46	65	34	31
3:00 AM	38	59	32	30
4:00 AM	43	62	34	30
5:00 AM	58	85	35	31
6:00 AM	41	57	40	33
7:00 AM	56	78	42	40
8:00 AM	63	88	41	37
9:00 AM	43	64	37	35
10:00 AM	52	67	43	37
11:00 AM	50	70	45	37
12:00 PM	56	74	49	39
1:00 PM	50	65	41	36
2:00 PM	57	87	39	35
3:00 PM	43	68	37	33
4:00 PM	35	54	33	30
5:00 PM	39	57	35	31
6:00 PM	58	82	41	34
7:00 PM	45	70	40	37
8:00 PM	48	55	49	40
9:00 PM	60	81	48	40
10:00 PM	57	83	44	38
11:00 PM	43	60	37	35

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	63	35	56	58	38	52
Lmax (Maximum)	88	54	71	85	57	68
L50 (Median)	49	33	41	44	32	37
L90 (Background)	40	30	36	38	30	33

Computed DNL, dBA	59
% Daytime Energy	78%
% Nighttime Energy	22%

GPS Coordinates	38°52'02.21"N
	121°09'47.30"W

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Appendix D-9
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Thursday, March 31, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	35	49	34	29
1:00 AM	31	50	28	25
2:00 AM	50	72	27	24
3:00 AM	27	38	26	24
4:00 AM	49	65	27	24
5:00 AM	34	56	28	25
6:00 AM	40	62	36	32
7:00 AM	51	67	41	37
8:00 AM	57	87	39	34
9:00 AM	45	68	39	36
10:00 AM	47	65	40	36
11:00 AM	44	64	37	34
12:00 PM	45	65	40	35
1:00 PM	49	67	40	36
2:00 PM	48	70	42	36
3:00 PM	50	74	40	36
4:00 PM	48	65	37	32
5:00 PM	44	66	35	31
6:00 PM	46	72	37	33
7:00 PM	41	68	37	32
8:00 PM	41	49	41	36
9:00 PM	48	65	41	38
10:00 PM	46	69	39	37
11:00 PM	47	61	37	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	41	49	50	27	45
Lmax (Maximum)	87	49	67	72	38	58
L50 (Median)	42	35	39	39	26	31
L90 (Background)	38	31	35	37	24	28

Computed DNL, dBA	52
% Daytime Energy	81%
% Nighttime Energy	19%

GPS Coordinates	38°51'59.65"N
	121°09'37.99"W

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Appendix D-10
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Friday, April 1, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	37	47	35	31
1:00 AM	42	63	31	26
2:00 AM	33	42	32	28
3:00 AM	52	68	36	31
4:00 AM	45	69	36	30
5:00 AM	37	56	34	31
6:00 AM	55	76	42	37
7:00 AM	52	68	44	41
8:00 AM	49	68	41	37
9:00 AM	46	67	43	36
10:00 AM	50	68	44	37
11:00 AM	49	67	41	35
12:00 PM	49	69	42	35
1:00 PM	49	69	44	37
2:00 PM	46	65	44	37
3:00 PM	49	63	39	36
4:00 PM	40	63	35	31
5:00 PM	45	68	36	33
6:00 PM	49	69	44	35
7:00 PM	60	80	52	38
8:00 PM	45	57	42	38
9:00 PM	56	80	43	37
10:00 PM	43	53	41	37
11:00 PM	44	60	39	35

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	60	40	52	55	33	48
Lmax (Maximum)	80	57	68	76	42	59
L50 (Median)	52	35	42	42	31	36
L90 (Background)	41	31	36	37	26	32

Computed DNL, dBA	55
% Daytime Energy	81%
% Nighttime Energy	19%

GPS Coordinates	38°51'59.65"N
	121°09'37.99"W

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Appendix D-11
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Saturday, April 2, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	36	53	35	31
1:00 AM	35	48	34	32
2:00 AM	38	53	35	33
3:00 AM	51	68	36	32
4:00 AM	39	55	34	31
5:00 AM	36	49	35	33
6:00 AM	44	61	39	36
7:00 AM	50	75	41	37
8:00 AM	51	71	42	36
9:00 AM	51	69	44	37
10:00 AM	52	71	45	40
11:00 AM	43	62	39	35
12:00 PM	54	70	40	36
1:00 PM	50	67	41	37
2:00 PM	61	79	52	39
3:00 PM	52	70	46	38
4:00 PM	42	61	38	35
5:00 PM	55	76	38	34
6:00 PM	47	66	38	34
7:00 PM	49	68	35	32
8:00 PM	40	55	36	34
9:00 PM	38	52	37	34
10:00 PM	41	55	36	32
11:00 PM	39	64	36	30

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	61	38	53	51	35	44
Lmax (Maximum)	79	52	68	68	48	56
L50 (Median)	52	35	41	39	34	35
L90 (Background)	40	32	36	36	30	32

Computed DNL, dBA	53
% Daytime Energy	93%
% Nighttime Energy	7%

GPS Coordinates	38°51'59.65"N
	121°09'37.99"W

BOLLARD
Acoustical Consultants

Appendix D-12
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Sunday, April 3, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	42	71	33	28
1:00 AM	51	75	33	29
2:00 AM	48	67	34	30
3:00 AM	35	54	32	27
4:00 AM	48	68	29	26
5:00 AM	51	81	35	28
6:00 AM	39	54	37	32
7:00 AM	52	76	41	37
8:00 AM	57	86	41	35
9:00 AM	43	67	37	33
10:00 AM	48	70	39	35
11:00 AM	48	73	38	34
12:00 PM	47	70	39	35
1:00 PM	53	70	41	35
2:00 PM	47	75	37	34
3:00 PM	43	62	39	36
4:00 PM	41	66	37	34
5:00 PM	39	61	35	32
6:00 PM	51	72	39	35
7:00 PM	43	65	38	36
8:00 PM	42	73	37	36
9:00 PM	52	74	39	37
10:00 PM	51	72	38	36
11:00 PM	42	61	36	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	39	50	51	35	48
Lmax (Maximum)	86	61	71	81	54	67
L50 (Median)	41	35	38	38	29	34
L90 (Background)	37	32	35	36	26	30

Computed DNL, dBA	55
% Daytime Energy	73%
% Nighttime Energy	27%

GPS Coordinates	38°51'59.65"N
	121°09'37.99"W

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Appendix D-13
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Thursday, March 31, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	36	45	35	32
1:00 AM	33	52	33	29
2:00 AM	37	60	32	28
3:00 AM	32	48	30	27
4:00 AM	47	63	29	26
5:00 AM	35	57	30	28
6:00 AM	46	67	37	33
7:00 AM	58	74	50	39
8:00 AM	61	88	40	36
9:00 AM	52	71	40	35
10:00 AM	50	70	40	35
11:00 AM	49	72	39	35
12:00 PM	62	91	42	37
1:00 PM	51	71	43	36
2:00 PM	70	96	42	37
3:00 PM	71	97	42	36
4:00 PM	48	64	37	32
5:00 PM	46	64	37	32
6:00 PM	47	69	37	34
7:00 PM	50	69	41	36
8:00 PM	44	58	43	41
9:00 PM	52	73	43	41
10:00 PM	45	67	40	38
11:00 PM	45	60	38	36

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	44	63	47	32	43
Lmax (Maximum)	97	58	75	67	45	58
L50 (Median)	50	37	41	40	29	34
L90 (Background)	41	32	36	38	26	31

Computed DNL, dBA	61
% Daytime Energy	99%
% Nighttime Energy	1%

GPS Coordinates	38°52'07.58"N
	121°09'28.99"W

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Appendix D-14
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Friday, April 1, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	40	63	36	33
1:00 AM	42	64	34	30
2:00 AM	34	53	32	30
3:00 AM	50	65	39	33
4:00 AM	62	90	39	34
5:00 AM	38	53	36	34
6:00 AM	51	72	43	39
7:00 AM	66	95	59	44
8:00 AM	64	75	61	42
9:00 AM	59	84	45	38
10:00 AM	52	77	42	36
11:00 AM	50	68	42	38
12:00 PM	47	69	41	36
1:00 PM	48	67	42	38
2:00 PM	49	65	42	36
3:00 PM	53	82	41	35
4:00 PM	47	65	39	32
5:00 PM	60	85	36	33
6:00 PM	64	91	42	36
7:00 PM	54	73	47	41
8:00 PM	45	58	44	42
9:00 PM	70	97	44	42
10:00 PM	43	55	42	40
11:00 PM	45	64	41	39

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	70	45	62	62	34	53
Lmax (Maximum)	97	58	77	90	53	64
L50 (Median)	61	36	44	43	32	38
L90 (Background)	44	32	38	40	30	35

Computed DNL, dBA	62
% Daytime Energy	92%
% Nighttime Energy	8%

GPS Coordinates	38°52'07.58"N
	121°09'28.99"W

BOLLARD
Acoustical Consultants

Appendix D-15
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Saturday, April 2, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	39	57	38	36
1:00 AM	38	50	37	35
2:00 AM	41	54	39	36
3:00 AM	48	67	38	35
4:00 AM	38	53	36	33
5:00 AM	40	57	38	36
6:00 AM	42	59	40	37
7:00 AM	69	96	40	36
8:00 AM	69	95	39	35
9:00 AM	66	77	64	38
10:00 AM	69	97	62	54
11:00 AM	68	78	49	39
12:00 PM	52	66	46	42
1:00 PM	59	86	44	40
2:00 PM	48	65	44	41
3:00 PM	49	65	44	39
4:00 PM	58	69	48	40
5:00 PM	56	69	40	36
6:00 PM	43	66	38	35
7:00 PM	50	67	41	37
8:00 PM	56	61	56	41
9:00 PM	47	70	41	39
10:00 PM	44	59	38	36
11:00 PM	41	57	38	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	43	64	48	38	42
Lmax (Maximum)	97	61	75	67	50	57
L50 (Median)	64	38	46	40	36	38
L90 (Background)	54	35	39	37	33	35

Computed DNL, dBA	62
% Daytime Energy	100%
% Nighttime Energy	0%

GPS Coordinates	38°52'07.58"N
	121°09'28.99"W

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Appendix D-16
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Sunday, April 3, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	42	71	36	34
1:00 AM	67	95	36	32
2:00 AM	49	66	32	30
3:00 AM	38	57	32	28
4:00 AM	45	65	32	29
5:00 AM	63	92	34	30
6:00 AM	40	57	37	32
7:00 AM	67	94	39	37
8:00 AM	73	97	40	35
9:00 AM	41	57	34	31
10:00 AM	44	72	36	32
11:00 AM	47	70	36	33
12:00 PM	43	62	37	34
1:00 PM	51	68	43	36
2:00 PM	64	91	39	35
3:00 PM	41	56	37	33
4:00 PM	40	64	33	29
5:00 PM	44	64	34	28
6:00 PM	69	95	41	32
7:00 PM	59	85	39	36
8:00 PM	64	67	65	39
9:00 PM	68	95	41	38
10:00 PM	67	96	38	35
11:00 PM	40	60	35	33

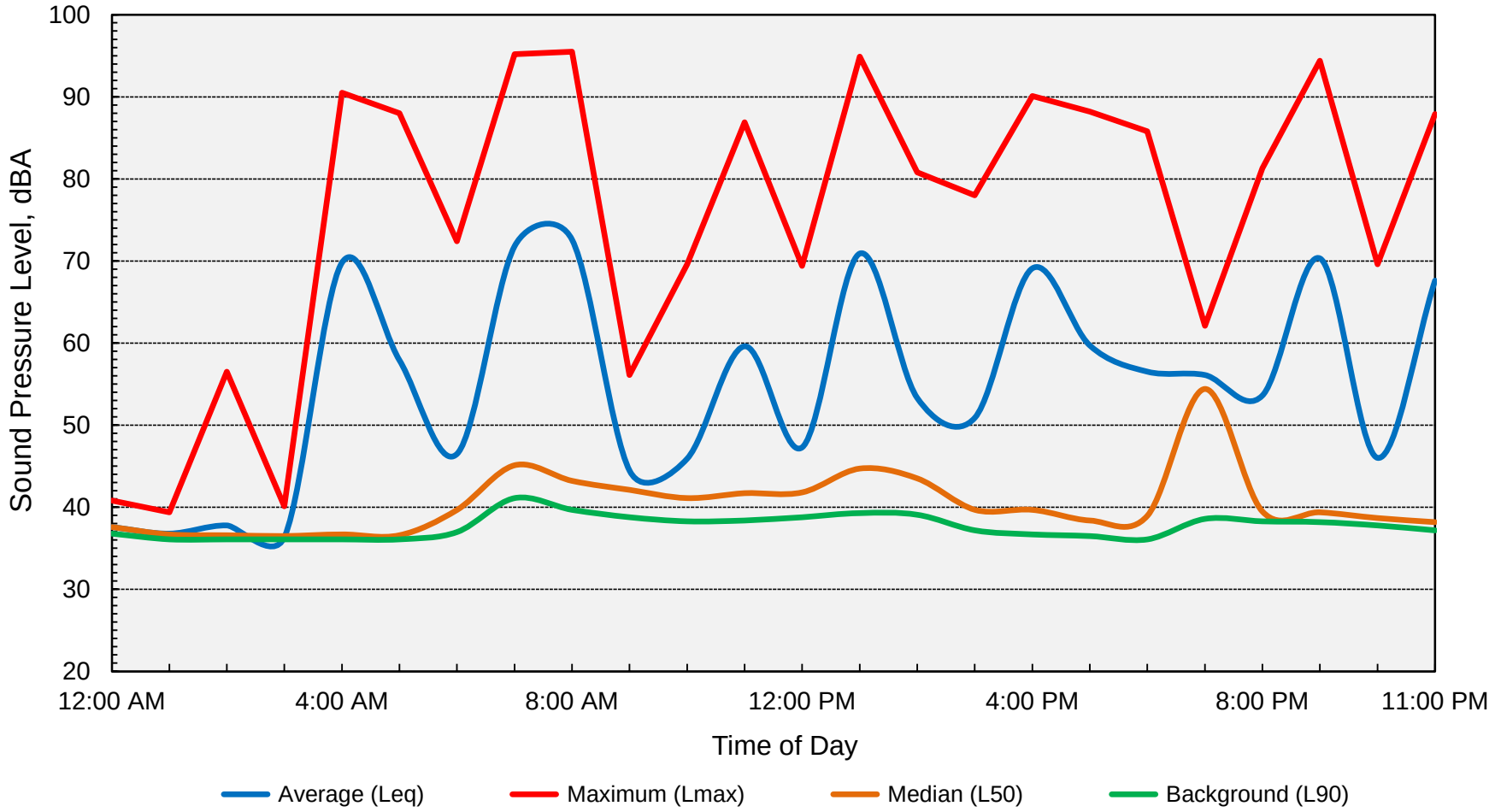
	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	73	40	65	67	38	61
Lmax (Maximum)	97	56	76	96	57	73
L50 (Median)	65	33	40	38	32	35
L90 (Background)	39	28	34	35	28	31

Computed DNL, dBA	69
% Daytime Energy	77%
% Nighttime Energy	23%

GPS Coordinates	38°52'07.58"N
	121°09'28.99"W

BOLLARD
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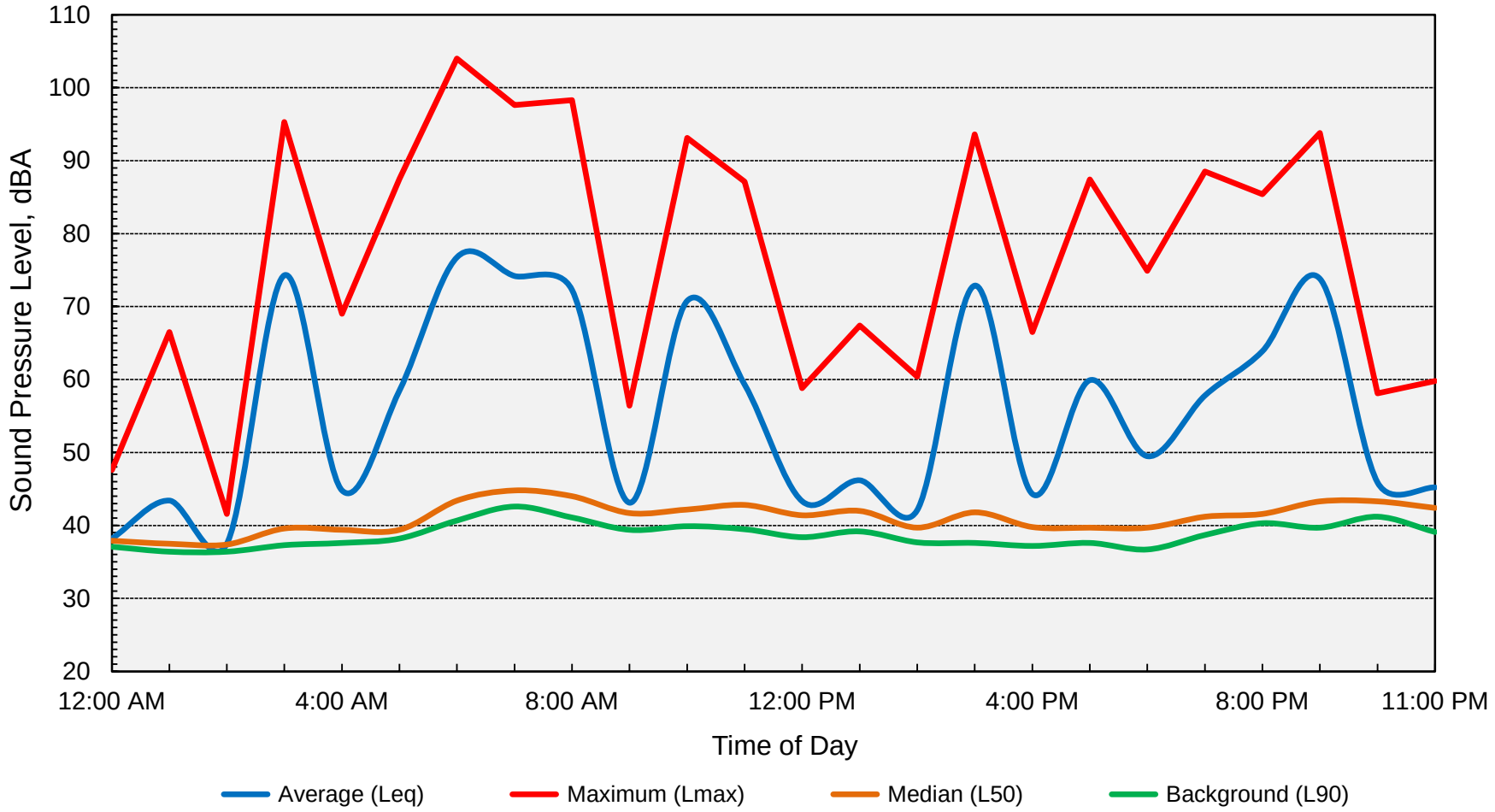
Appendix E-1
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Thursday, March 31, 2022



Computed DNL = 70 dB

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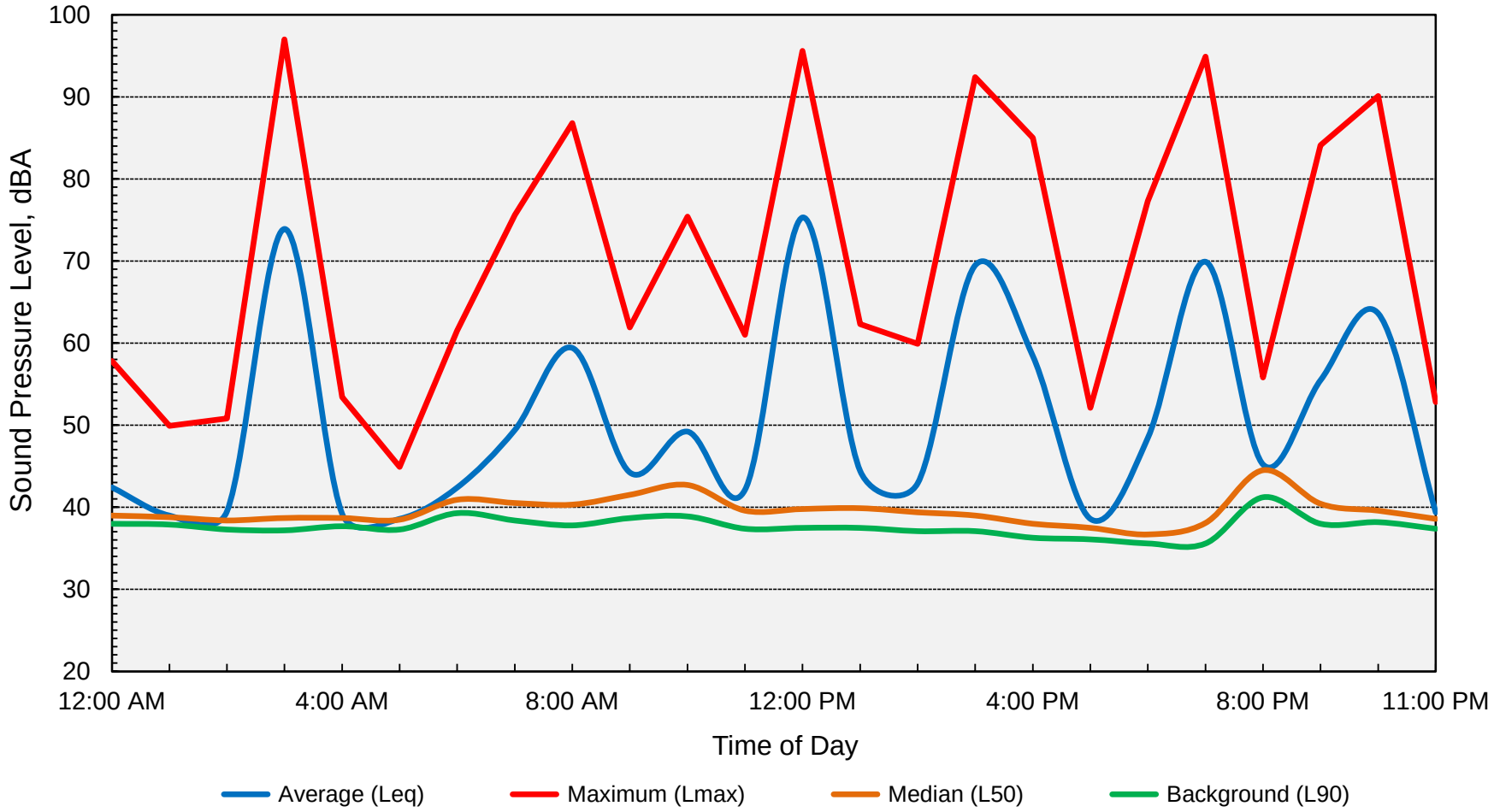
Appendix E-2
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Friday, April 1, 2022



Computed DNL = 76 dB

BOLLARD
Acoustical Consultants

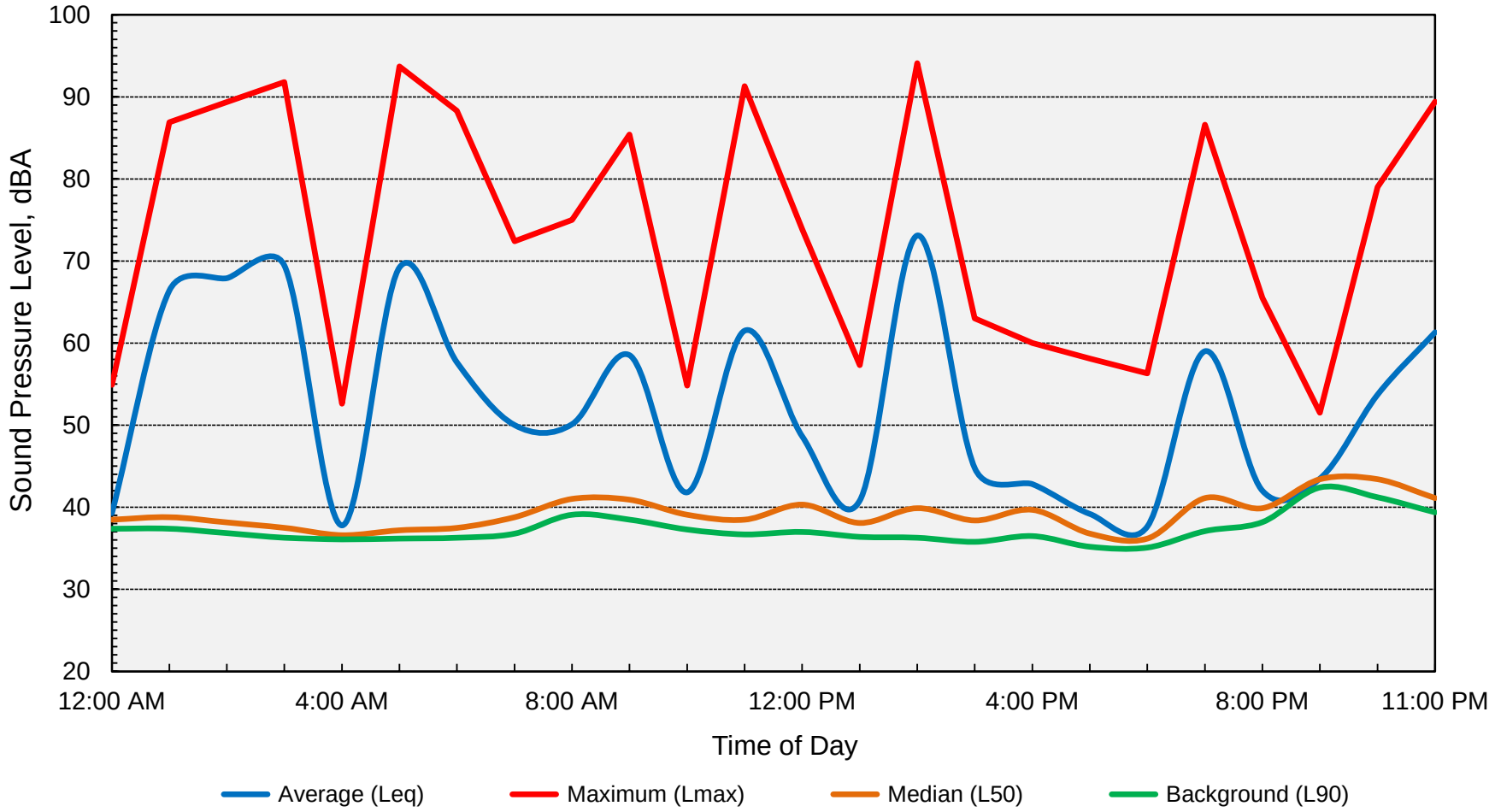
Appendix E-3
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Saturday, April 2, 2022



Computed DNL = 71 dB

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Acoustical Consultants

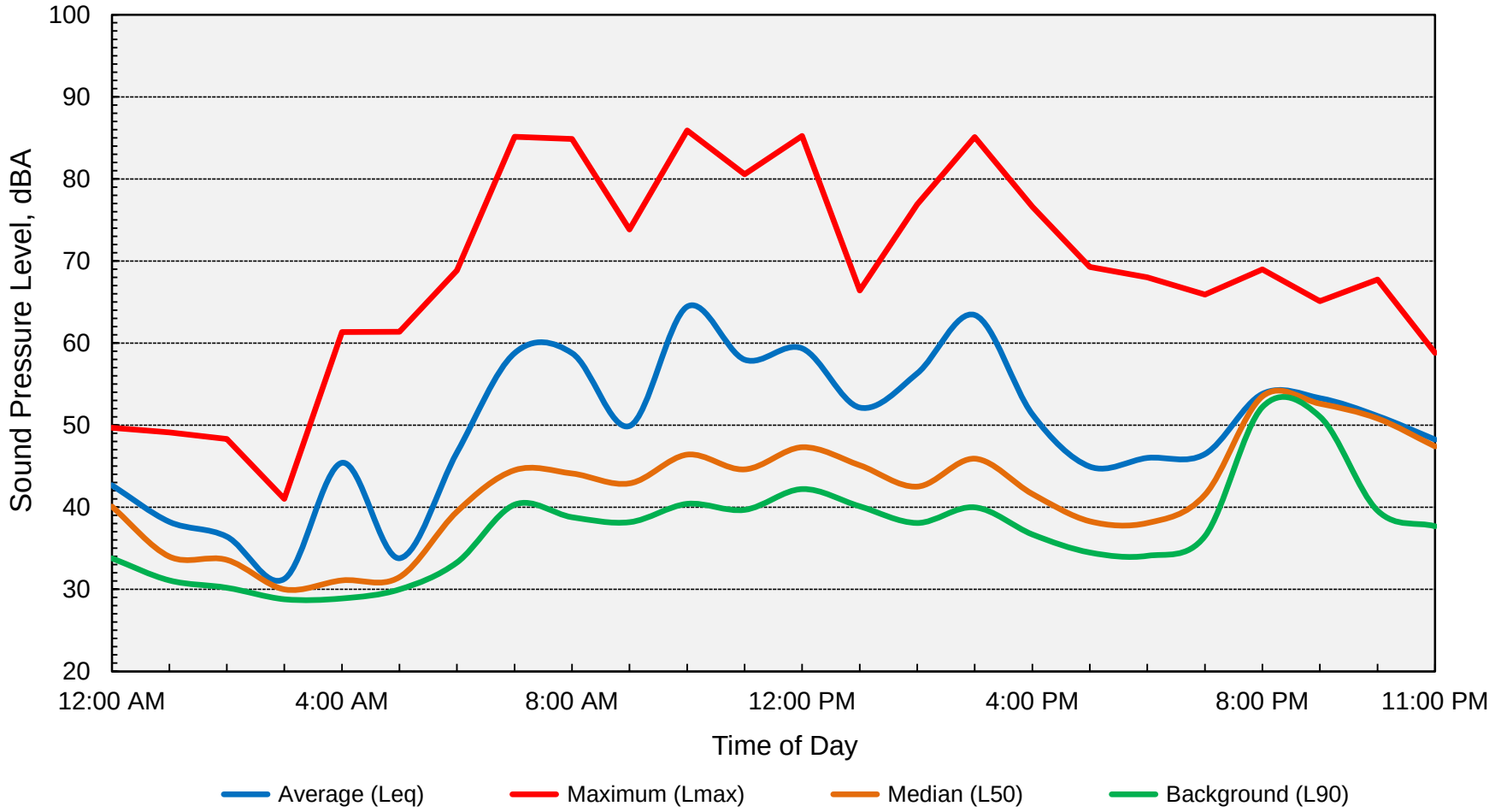
Appendix E-4
Long-Term Ambient Noise Monitoring Results - Site 1
Project 8 Winery - Placer County, California
Sunday, April 3, 2022



Computed DNL = 71 dB

BOLLARD
Acoustical Consultants

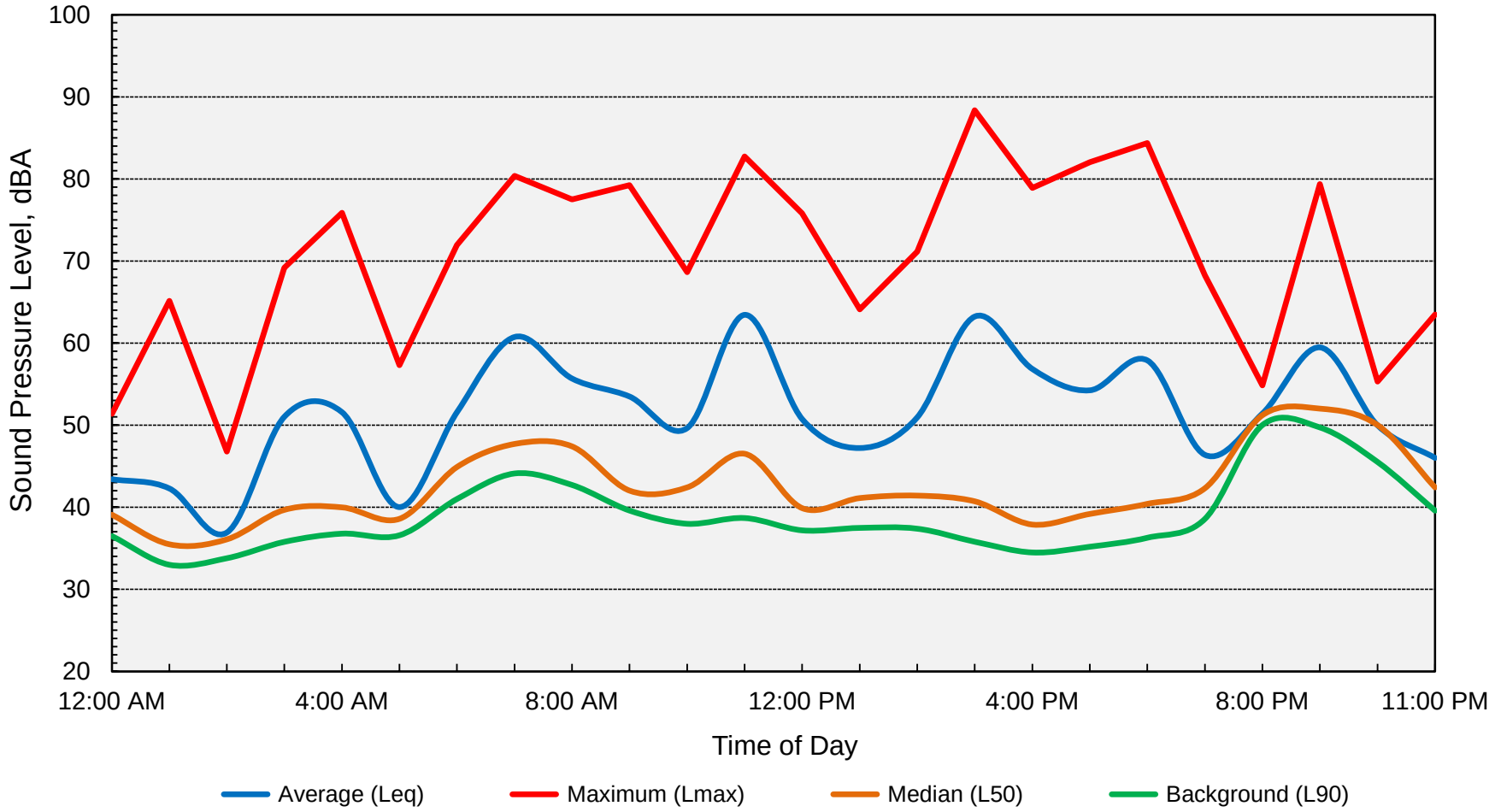
Appendix E-5
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Thursday, March 31, 2022



Computed DNL = 57 dB

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Acoustical Consultants

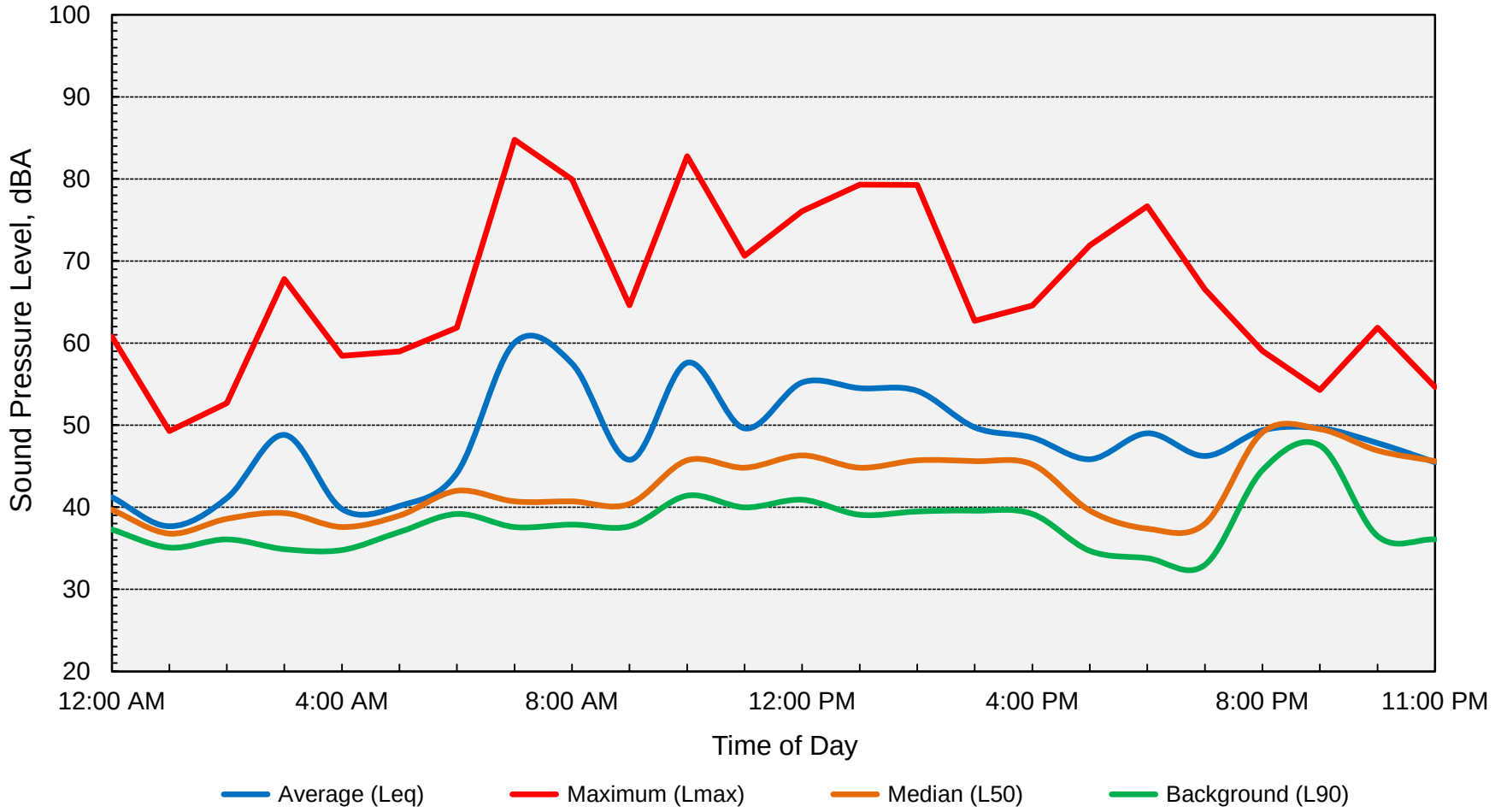
Appendix E-6
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Friday, April 1, 2022



Computed DNL = 58 dB

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Acoustical Consultants

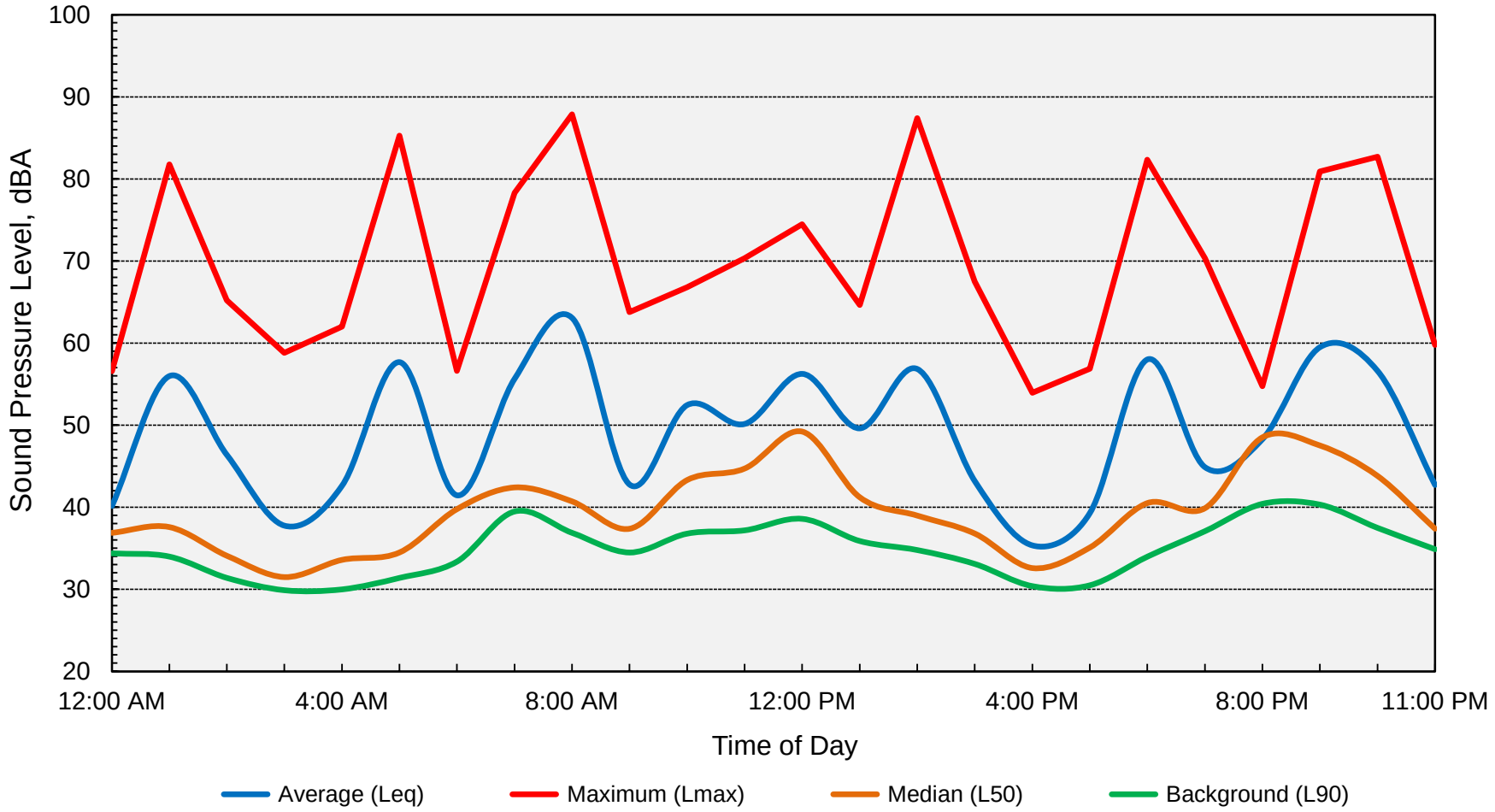
Appendix E-7
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Saturday, April 2, 2022



Computed DNL = 54 dB

BOLLARD
Acoustical Consultants

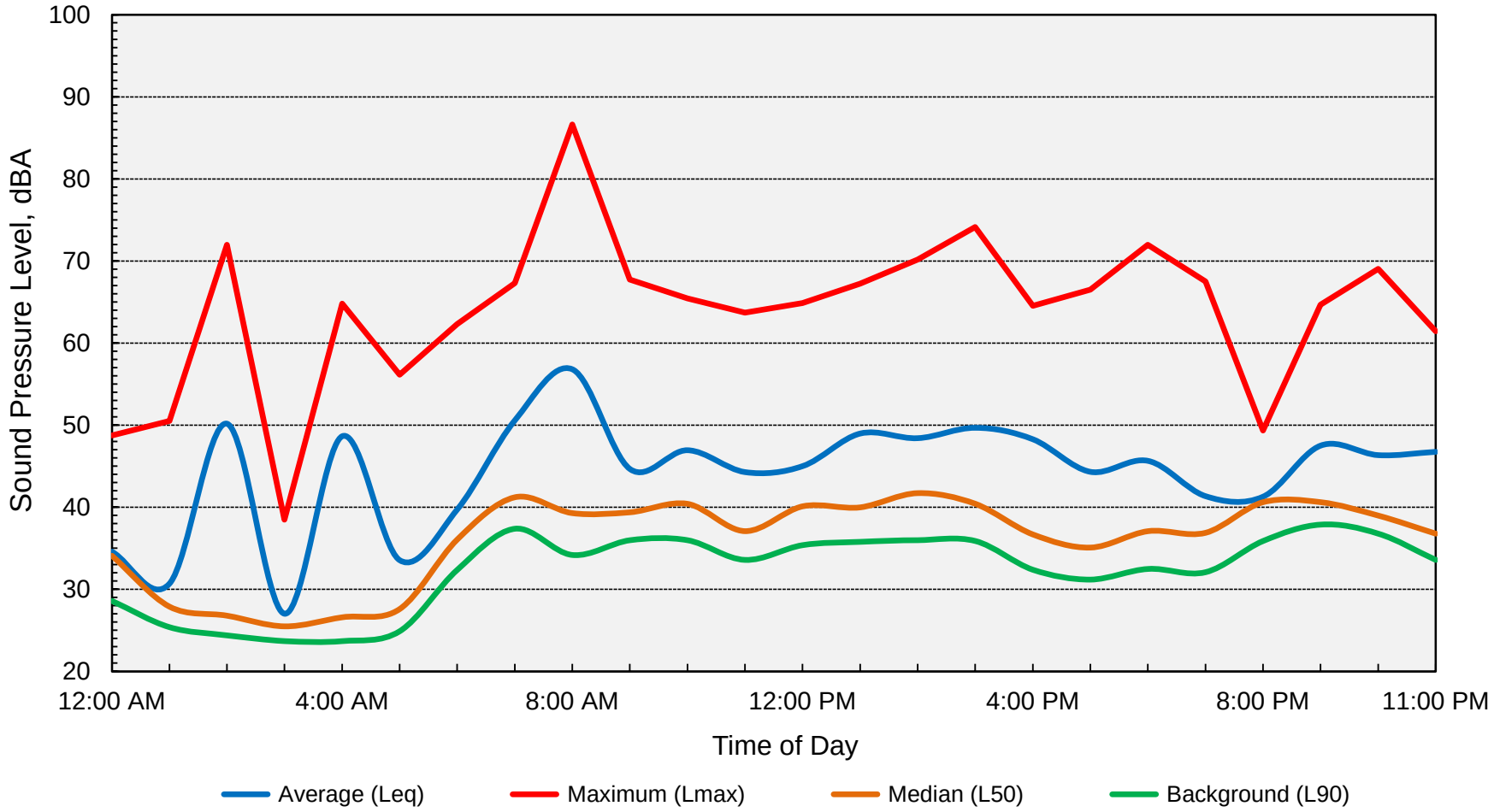
Appendix E-8
Long-Term Ambient Noise Monitoring Results - Site 2
Project 8 Winery - Placer County, California
Sunday, April 3, 2022



Computed DNL = 59 dB

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Acoustical Consultants

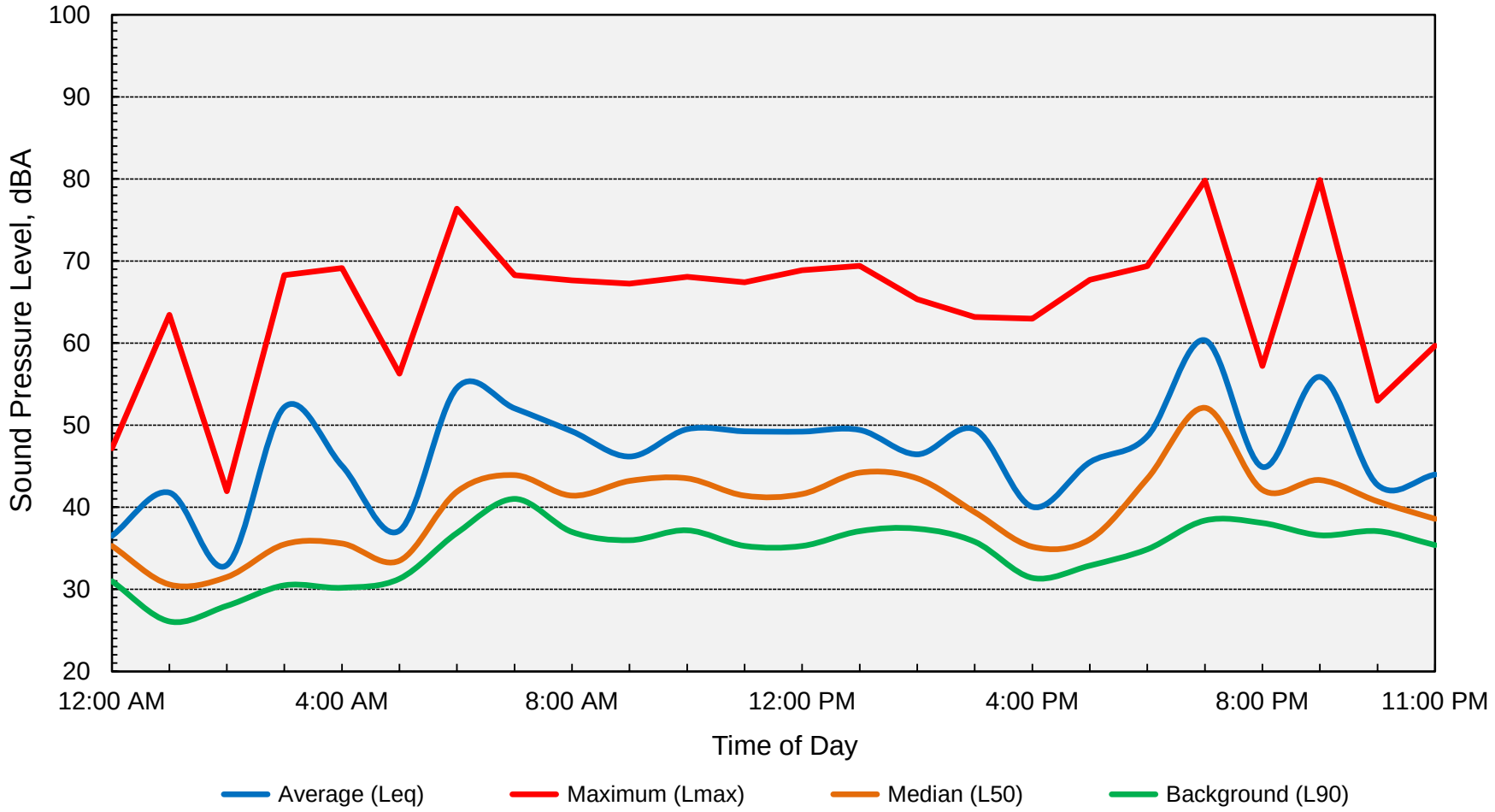
Appendix E-9
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Thursday, March 31, 2022



Computed DNL = 52 dB

BOLLARD
Acoustical Consultants

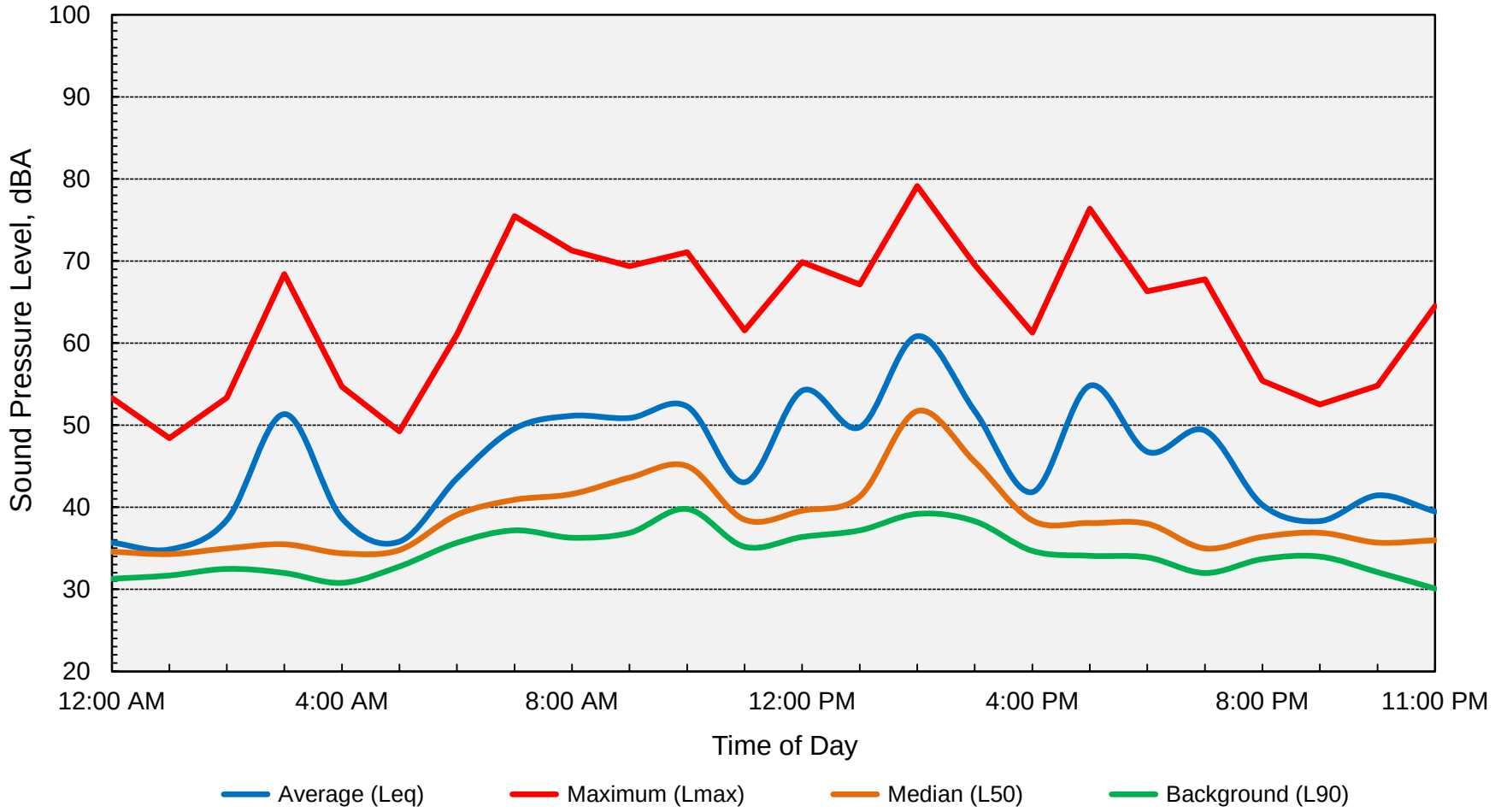
Appendix E-10
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Friday, April 1, 2022



Computed DNL = 55 dB

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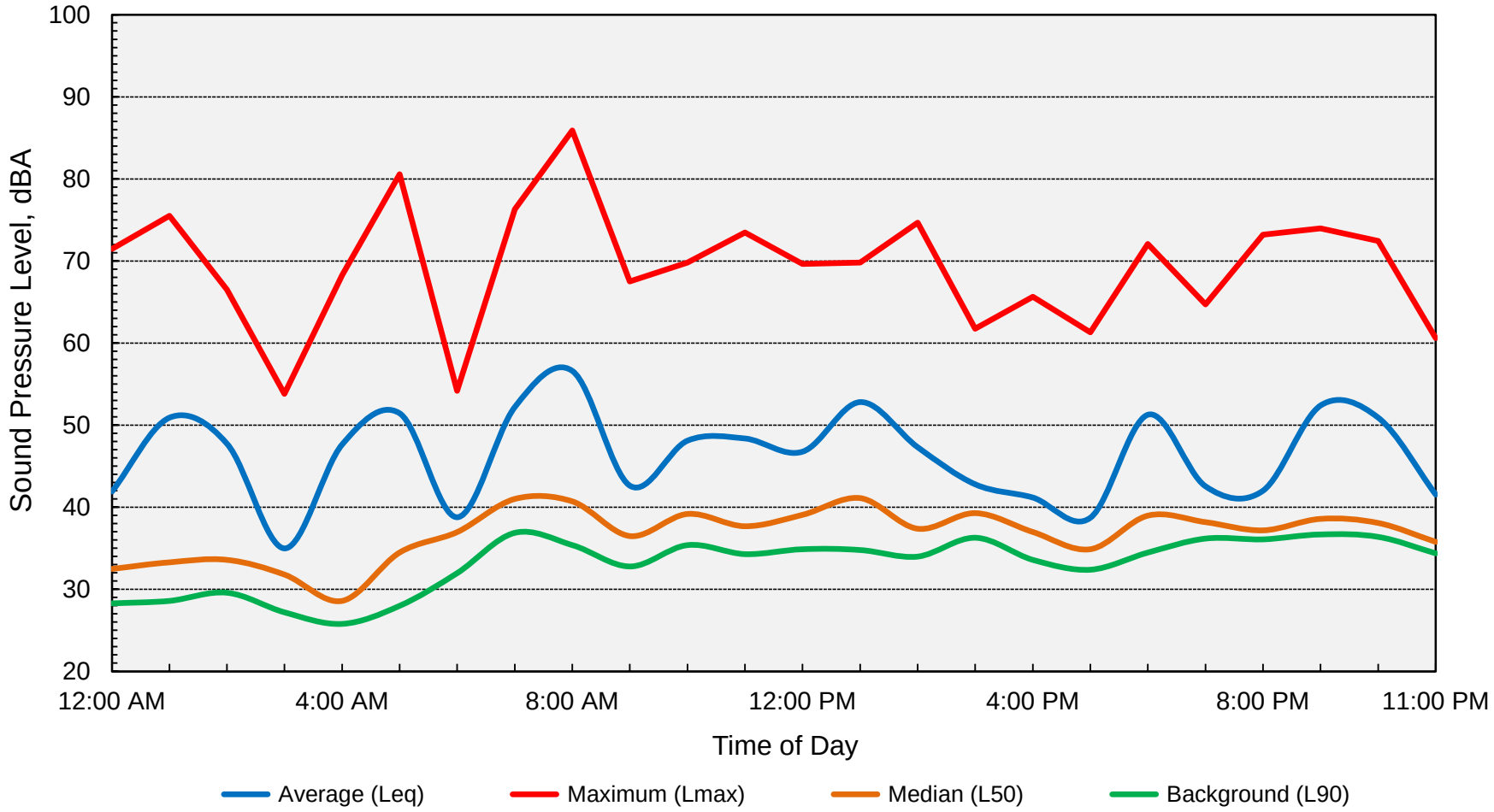
Appendix E-11
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Saturday, April 2, 2022



Computed DNL = 53 dB

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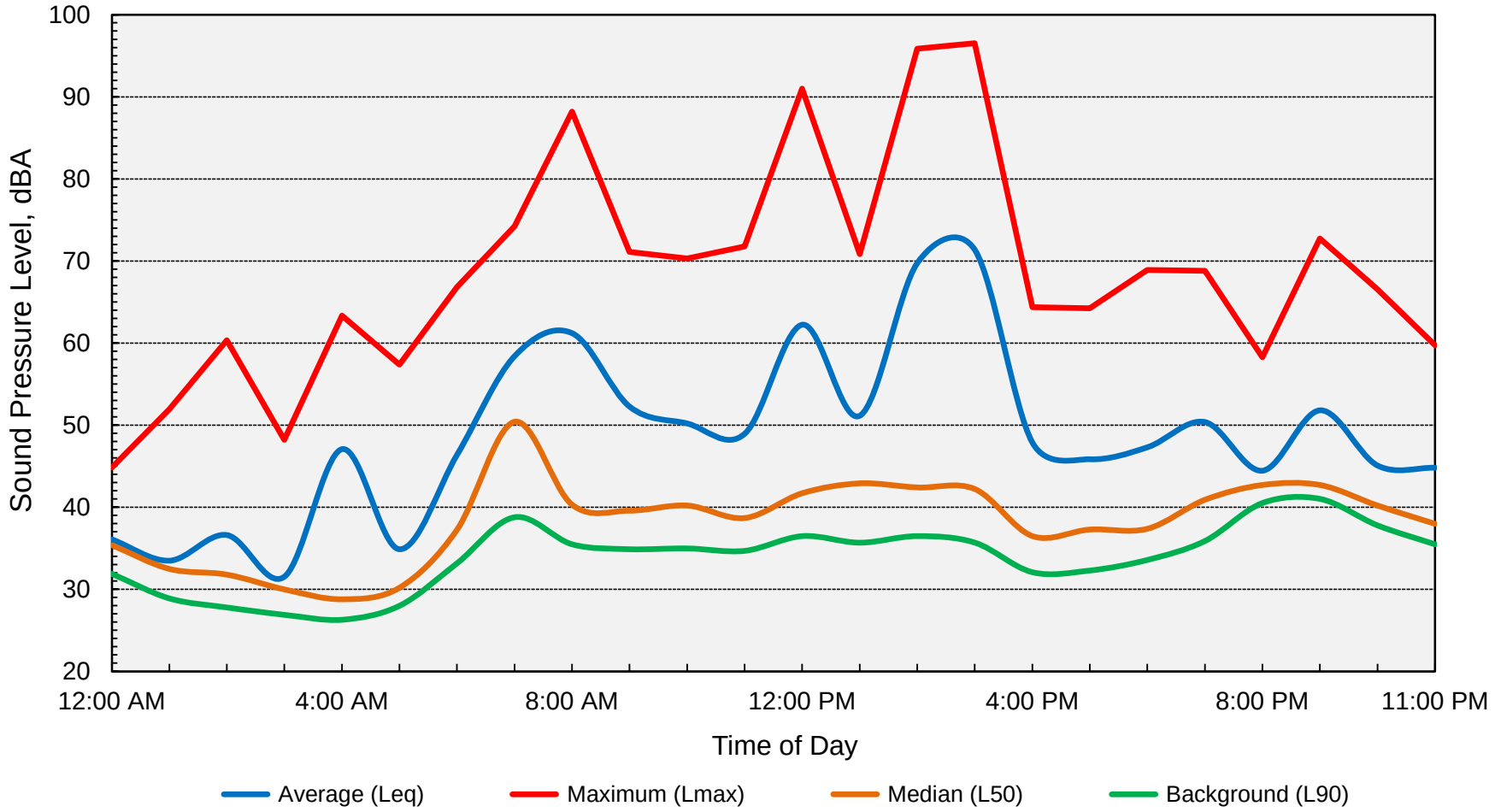
Appendix E-12
Long-Term Ambient Noise Monitoring Results - Site 3
Project 8 Winery - Placer County, California
Sunday, April 3, 2022



Computed DNL = 55 dB

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Acoustical Consultants

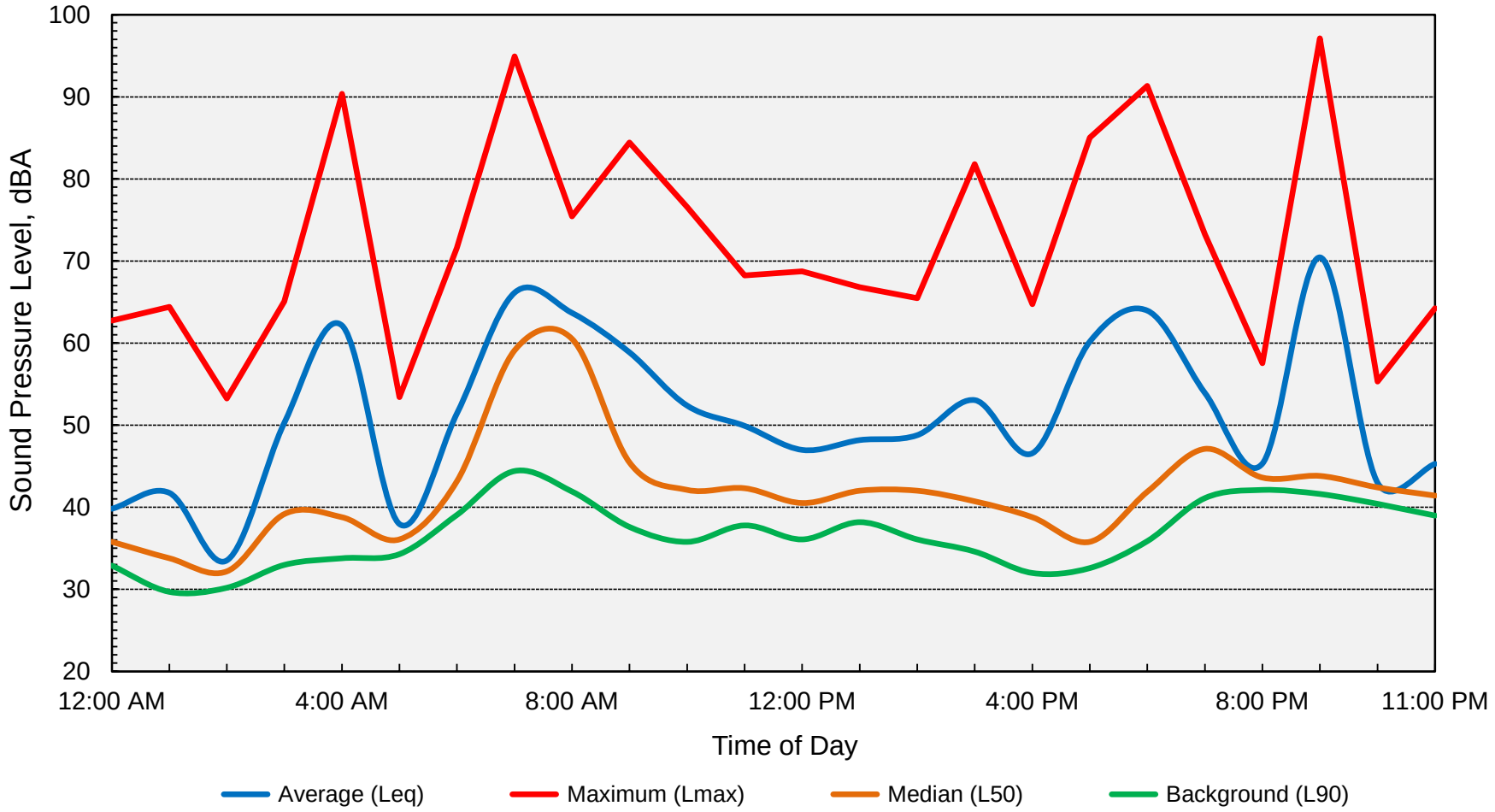
Appendix E-13
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Thursday, March 31, 2022



Computed DNL = 61 dB

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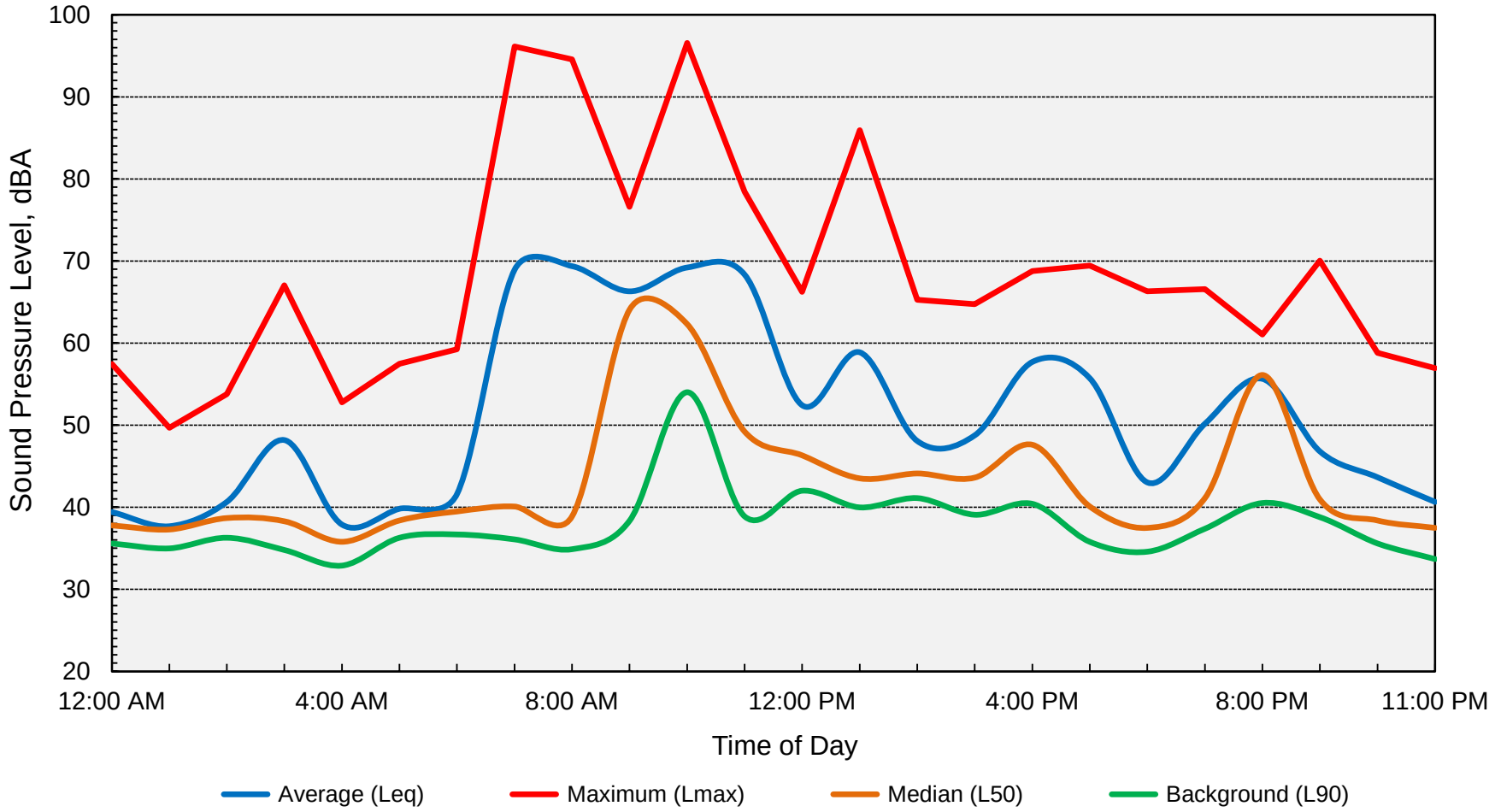
Appendix E-14
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Friday, April 1, 2022



Computed DNL = 62 dB

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Acoustical Consultants

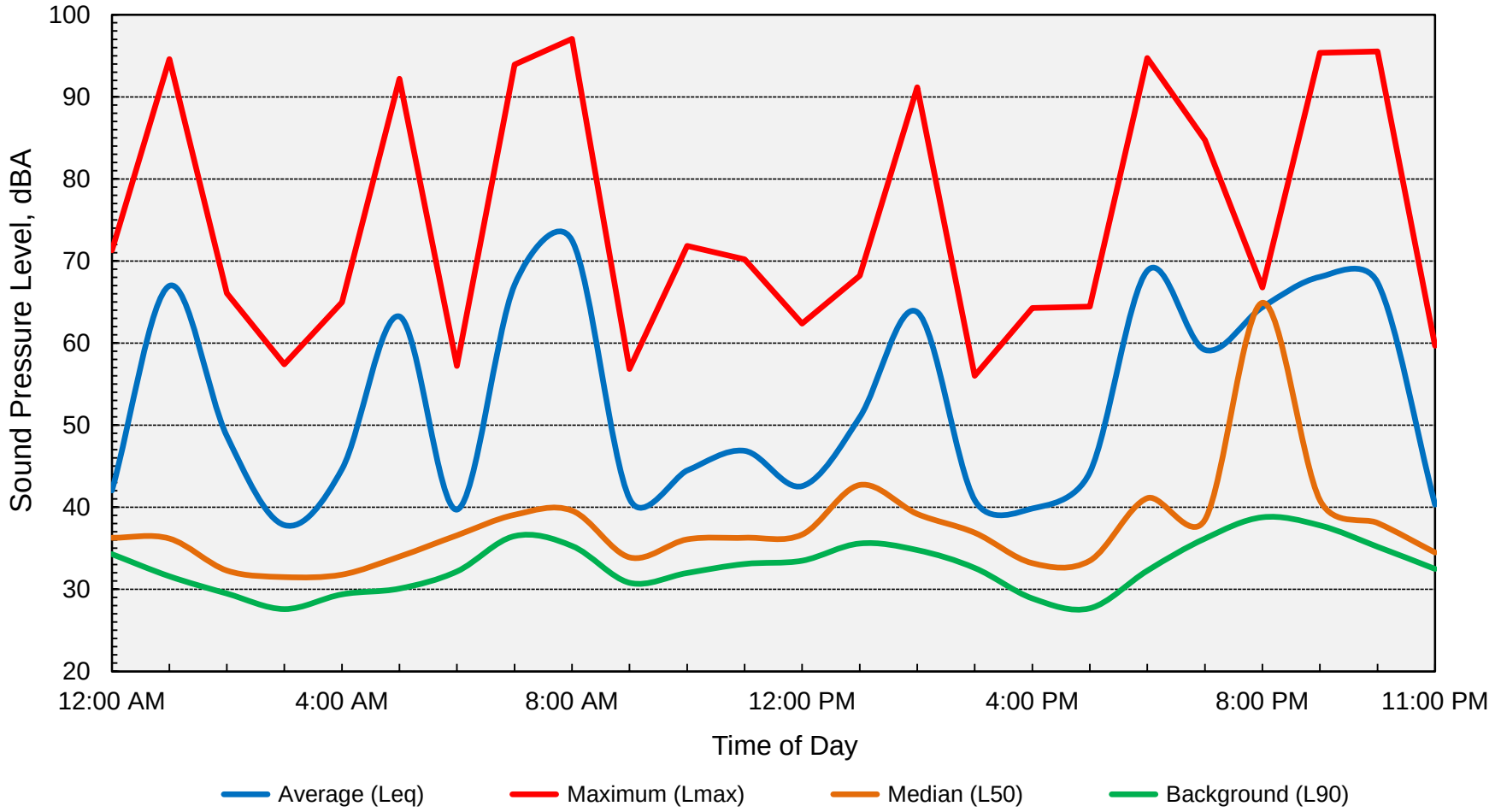
Appendix E-15
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Saturday, April 2, 2022



Computed DNL = 62 dB

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Appendix E-16
Long-Term Ambient Noise Monitoring Results - Site 4
Project 8 Winery - Placer County, California
Sunday, April 3, 2022



Computed DNL = 69 dB

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APPENDIX P

Cranmer Engineering, Inc.
Integrated Engineering Services

August 5, 2020

State Water Resources Control Board
1001 I Street, 13th Floor
Sacramento, CA 95814

Re: Mima Capital LLC. Domestic Water System Permit Application Technical Report for a proposed public water system to be located at 7615 Callison Rd and 7535 Ridgeview Ln, Penryn, CA 95663.

Dear Sir or Madam:

This document provides responses to the Preliminary Technical Report Guidance documents requirements for a new public drinking water system application. The application is Mima Capital LLC. The proposed facility is a winery including a processing area, an associated accessory restaurant, tasting room, and a residence.

The winery is to be located at 7615 Callison Rd and 7535 Ridgeview Ln, Penryn, CA 95663. One or more groundwater wells, constructed to public drinking water standards, shall be located on the property, and used for domestic water.

The responses to the Technical Report questions are as follows…..

Section I – Applicant General Information

Name of applicant: Mima Capital LLC.; Mike Fournier (Managing Member)

Phone number of applicant: 916-813-9920

Email address of applicant: mfournier@mimacap.com

Name of engineering consultant responsible for the project: Cranmer Engineering Inc. (CEI)

Phone number of engineering consultant: 530-273-7284

Email of engineering consultant: Dobryan@cranmerengineeringinc.com

Have you applied to be a public water system previously for this property? ☐Yes ☐No

Who is the legal owner of the property? Mima Capital LLC.

Proof of ownership of any water treatment facilities and well sites must be documented. Ownership deed is located in Appendix F.

Section II – General Information on the Proposed Water System

County of proposed new public water system: Placer

Assessor's Parcel Number(s) or address of proposed new public water system:

APNs: 031-220-061; 7615 Callison Rd, Penryn, CA 95663 / 032-124-080; 7535 Ridgeview Ln, Penryn, CA 95663

Number of proposed connections (e.g. buildings, homes, etc.) the new public water system would serve:

4 Buildings:

- Utility Building
- Lower Processing Building
- Upper Tasting Room Building and Tunnel
- Auxiliary Support Building

Number of people the new public water system would serve:

353 Days/Year – Estimated Low: 32 / Max: 116 / Average: 74
12 Days/Year – Estimated Low: 216 / Max: 268 / Average: 242

Number of days per year the new public water system will serve water (e.g. 365): 365

What are the sources of water for the proposed public water system (mark all that apply, note: more detailed source information is required in Section VI):

☐Lake or Pond ☐River/Stream ☐Creek ☐Spring ☐Well ☐Multiple Wells
☐Well within 100 feet of a lake, river, or creek ☐Unknown/source does not exist yet

What type of properties will be served, indicate all that are applicable, or provide a copy of the use permit:

☐Residential community ☐Businesses ☐ Industrial Park ☐ Schools/Daycares
☐ Winery ☐Restaurant ☐ Park/Recreation ☐ Mobile Home Park ☐Other:

If the proposed water source is surface water (e.g. lake, river, creek, well near river, etc.) do you currently possess water rights to the source? ☐Yes ☐No (Surface water rights must be documented.) N/A

Is any treatment known to be required for the source water? If yes, explain. To be determined upon drilling of the domestic wells

Provide a summary description of the proposed water system (physical facilities, type of legal entity it will be, who it will serve, who will manage it, existing facilities that will be incorporated, any contamination in the local area that could impact the water quality, other pertinent factors).

Mima Capital LLC. proposes to develop and operate a winery facility which will require a public water system permit to provide domestic water to the following onsite demands.

- Operations Employees
- Tasting Room and Restaurant
- Residence (3BR/3BA)
- Events

Management of water system: Mima Capital LLC.

Contamination in the location area groundwater: No or Unknown

A map of the proposed boundaries of the new public water system is included in the Figures Section of this report.

Section III – Discussion of the Potential for the Proposed Water System to be served by an Existing Water System

List the names of all community water systems with boundaries within a 3-mile distance from the proposed public water system's service below.

1. Placer County Water Agency (PCWA) is the only domestic public water system within 3 miles of the proposed project.

Is the proposed water system in the County Local Area Formation Commission's (LAFCo) sphere of influence boundary for any city or municipal water service? CHSC 116527(c)(9) ☐Yes ☐No (PCWA)

Connection Feasibility Report

A. MDD AND PHD

In order to determine the size of onsite/offsite pipelines, and storage needed for the winery's domestic water use the Max Day Demand (MDD) and Peak Hour Demand (PHD) were calculated based on assumed population of employees, and visitors to the facility as provided by the owners. See Appendix A for complete calculations.

The result of the calculations are:

- MDD = 7,176 gpd or 4.98 gpm
- PHD = 448 gph or 7.47 gpm

These amounts do not include any allowance for fire flow demands or irrigation demands.

Note that irrigation demands are provided by a separate water system connected to and using PCWA non-potable ditch water as well as existing onsite non-public domestic wells.

B. FIRE DEPARTMENT REQUIREMENTS

Regardless of whether there is an onsite public water system groundwater well(s), or PCWA water system connection, the local fire department requirements would be applicable.

The fire department and contact person that has jurisdiction in this area is:

Chief Higgins
Penryn Fire District
7206 Church Street
Penryn, CA 95663
Phone: 916-663-3389

Chief Higgins was contacted by phone on 6/11/2020 by Tom Leland, CEI, and provided the following summarized information concerning the districts requirements:

a. Fire flow requirements for commercial use can be up to 1500 gpm, and depends on the square footage of buildings, and the closeness of each building to each other, and the type of building construction
b. All buildings need to have sprinklers, smoke alarms, and defensible space
c. The district uses the State Fire Code fire protection requirements

Based on the above information fire flow demand alternates of 0, 500, and 1500 gpm were used in the calculations, and cost estimates in the analysis below.

C. PCWA SYSTEM CONNECTION

The PCWA contact person that has jurisdiction in this area is:

PCWA
Richard Wirth, Assistant Engineer
144 Ferguson Road
PO Box 6870
Auburn, CA 95604
Phone: 530-823-4886

Mr. Wirth was contacted 1st on April 2, 2020 and then responded with a letter dated May 6, 2020 to Evan Mackenzie. A copy of the letter is included in Appendix B. Mr. Wirth was contacted a 2nd time on June 10, 2020 via phone by Tom Leland of CEI.

A map showing the proposed path of the PCWA New Agency Waterline, and project site is included in the Figures Section of this report.

The results of the communications concerning connection to the PCWA system are summarized as follows:

a. Maximum static pressure at the winery site on Callison Rd would be 40 psi.
b. The Ophir Treatment Plant and domestic line through the property is not anticipated to be constructed for another 10 to 20 years.
c. The closest PCWA domestic line is located in English Colony Way, and is shown on Figure 1, Figures Section. With a water line extension being approximately 1.75 miles long from English Colony Way to Clark Tunnel Road to Callison Rd, to the project site.
d. The line will be deeded to PCWA
e. There will be fees in addition to construction costs to include:

i. County road encroachment fee
ii. PCWA plan check/inspection fees
iii. Water connection fees
iv. Construction bonding
v. Connection fee based on water demand and meter size
vi. Water rate monthly usage charge.
vii. PCWA does not have a master plan for any water lines in this area
viii. The site will require a booster pump from the PCWA line to provide the required water pressure, this may also require a storage tank.
ix. Because of rural area, PCWA may not require the water line upsizing for future use as the rural area does not justify this
x. Minimum line size depends on flow required with: 6" =620 gpm; 8" = 1100 gpm; 12" = 2400 gpm
xi. Maximum water line velocity not greater than 7 fps

Using the above information from PCWA, and the Penryn Fire District, calculations were made to determine the size of line required assuming 0, 500, and 1500 gpm fire flow available from the PCWA system.

The winery site at Callison Rd is approximately 300' higher (130 psi pressure loss due to elevation) than the connection at English Colony Way, and if the static pressure at the winery site is 40 psi, this results in a static pressure available at the English Colony Way connection to 170 psi. Using this pressure loss, and assuming a minimum pressure at the winery site to be 30 psi, calculations were made to determine line size to provide the fire flows required. The calculations are included in Appendix C, and have velocities substantially less than 7 fps. A summary of the calculations is a follows:

- A 6" pipe would supply 110 gpm at the site (a 6" line is the smallest assumed permitted). This line would be able to supply the sites MDD and PHD but only about 100 gpm for fire purposes
- A 12" pipe would supply 677 gpm at the site (this would supply a 500 gpm fire flow)
- A 16" pipe would supply 1448 gpm at the site (this is close enough for a 1500 gpm fire flow)

A cost estimate was made for the three alternate systems described above. Details of the construction costs, design costs, permitting costs, and other fees is included in Appendix D, and summarized below:

Fire Flow Requirement at gpm	PCWA Connection			Onsite System		
	Construction	Other, a)	Total	Construction	Other, b)	Total
0	$ 982,200	$ 364,039	$ 1,346,239	$ 169,171	$ 25,534	$ 194,705
500	$2,323,800	$ 686,023	$ 3,009,823	$ 388,135	$ 43,051	$ 431,186
1500	$3,452,400	$ 956,887	$ 4,409,287	$1,184,968	$107,295	$1,292,263
Notes:						
a)	Other costs are: survey; design; construction stake/manage; PCWA plan check/inspection, connection, bond fee; Penryn Fire plan check fee, County Encroachment permit fee.					

The first year maintenance and operation costs are billed monthly by PCWA per the details included in Appendix D and summarized for the total first year below:

Fire Flow Requirement at gpm	PCWA Total
0	$ 2,840
500	$ 2,840
1500	$ 2,840

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D. Onsite Domestic System, Groundwater well

The following responses are in relation to a 20 year projection of cost to install, operate, and maintain an onsite public water system.

Note the proposed public water system is for a Transient, Non-Community system. In most instances the facility can shut down the system and cease being a public water system without creating a hardship for the water users.

No onsite system (groundwater well(s)) design plans have been developed for the site at this time, therefore it is necessary to develop a preliminary design concept in order to determine the estimated magnitude of costs for an onsite public water system that could be compared to connection to the PCWA system.

Based on other similar demands, the onsite systems assumed facilities are as shown on the figures included in Appendix E. The assumed system consists of an onsite groundwater well, 2" water lines, a pressure tank, two 3600 gallon storage tank (for MDD), booster pumps, pressure tanks, valves, sample test cocks, a building, and miscellaneous piping.

Fire storage capacity was assumed for three scenarios as follows: zero fire flow; 500 gpm fire flow system, to be for 2 hours or 60,000 gallons; and 1500 gpm fire flow system to be for 4 hours or 360,000 gallons. For fire storage in our calculation we assumed one tank, however more than one tank can be used as long as the total storage volume meets the fire demand.

A cost estimate was made for the three scenarios. Details of the construction costs, design costs, permitting costs, and other fees is included in Appendix E, and summarized below:

Fire Flow Requirement at gpm	Onsite System		
	Construction	Other, b)	Total
0	$ 169,171	$ 25,534	$ 194,705
500	$ 388,135	$ 43,051	$ 431,186
1500	$ 1,184,968	$ 107,295	$ 1,292,263

Notes:

b) Other costs are: survey, design, construction stake/manage, plan check, PHS application

The first year maintenance and operation costs for the onsite system details are included in Appendix E and summarized for the first year below:

Fire Flow Requirement at gpm	Onsite System		
	O & M	General&Admin	Total
0	$ 10,105	$ 3,966	$ 14,071
500	$ 11,155	$ 4,966	$ 16,121
1500	$ 11,656	$ 5,966	$ 17,622

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E. Cost Comparison PCWA Connection to Onsite Groundwater System

The following is a comparison of the construction costs to Connect to the PCWA system versus construction of an onsite groundwater well system:

Fire Flow Requirement at gpm	PCWA Connection			Onsite System		
	Construction	Other, a)	Total	Construction	Other, b)	Total
0	$ 982,200	$ 364,039	$ 1,346,239	$ 169,171	$ 25,534	$ 194,705
500	$2,323,800	$ 686,023	$ 3,009,823	$ 388,135	$ 43,051	$ 431,186
1500	$3,452,400	$ 956,887	$ 4,409,287	$1,184,968	$107,295	$1,292,263
Notes:						
a)	Other costs are: survey; design; construction stake/manage; PCWA plan check/inspection, connection, bond fee; Penryn Fire plan check fee, County Encroachment permit fee.					
b)	Other costs are: survey, design, construction stake/manage, plan check, PHS application					

In all cases construction costs to provide an onsite groundwater well public water supply as Transient, Non-Community System, is substantially less expensive than the PCWA system connection. The following is a comparison of the first year annual onsite system M&O Costs versus the PCWA estimated annual rate:

Fire Flow Requirement at gpm	PCWA Total	Onsite System		
		O & M	General & Admin	Total
0	$ 2,840	$ 10,105	$ 3,966	$ 14,071
500	$ 2,840	$ 11,155	$ 4,966	$ 16,121
1500	$ 2,840	$ 11,656	$ 5,966	$ 17,622

In all cases the annual M&O costs of the onsite groundwater well public water supply system versus is approximately four (4) times larger per year than PCWAs use rate.

- It should be noted that PCWAs rate schedule has a built in rate increase each year tied to the ENR (Engineering News Record) cost index.
- Assuming there was no interest rate or ENR increase, it would take approximately 103 to 211 years of onsite payments (depends on fire flow system alternate) to pay for the difference of PCWA construction cost compared to the onsite system construction cost.

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SECTION IV. Managerial Consolidation

If physically connecting to another water system appears unfeasible, submit a discussion of all actions taken by the applicant to pursue a contract for managerial or operational oversight from the identified community water systems in Section III. This should include a summary of names, dates and contact information of those individuals you have interacted with as well as their responses. CHSC 116527(c)(7).

- *See SECTION III for a discussion of the contact persons and the results of those contacts*

Due to the small size of the proposed onsite groundwater well public water system it is outside of PCWA's scope, and unnecessary for PCWA to oversee the management and operations of said system. Placer County Environmental Health will have oversight of the system. Additionally, a licensed drinking water operator will be required to operate and maintain the system.

SECTION V. Cost of Proposed New Public Water System

The cost of constructing and operating a new onsite public water system (groundwater well supply) for Mima Capital LLC. is included in SECTION III. D.

SECTION VI. 20 Year evaluation of Proposed New Public Water System's Supply Capacity

It is assumed based on other small privately owned water systems in Placer County (Wise Villa Winery, Turkey Creek Golf Club, Gold Hill Mobile Home Park, etc). That groundwater wells in the area are capable of producing the amount of water necessary to meet the proposed facilities MDD. Moreover, the proposed facility is a transient, non-community system and can put operations on hold should the water supply fall below acceptable levels to maintain full operations.

SECTION VII. Cost-Comparison

The cost of constructing and operating a new onsite public water system (groundwater well supply) for Mima Capital LLC. versus connection to PCWA is included in SECTION III. E and includes the following conclusions:

- In all cases **construction costs** to provide an onsite groundwater well public water supply as a Transient, Non-Community System, is substantially less expensive than the PCWA system connection.

- In all cases the **annual M&O costs** of the onsite groundwater well public water supply system is approximately four (4) times larger per year than PCWAs use rate. However:

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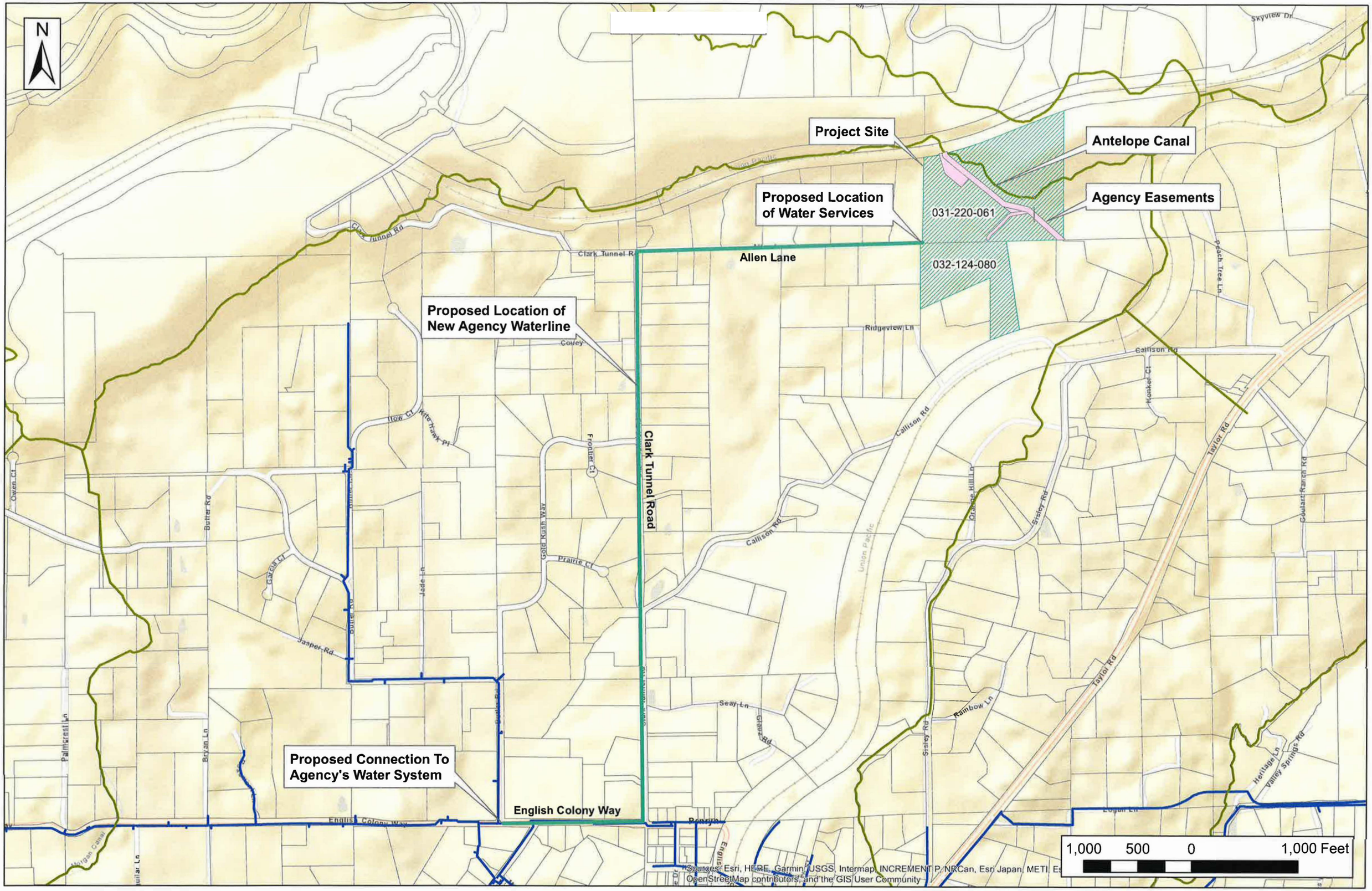
a. It should be noted that **PCWAs rate schedule has a built in rate increase** each year tied to the ENR (Engineering News Record) cost index.

b. Assuming there was no interest rate or ENR increase, **it would take approximately 103 to 211 years of onsite payments** (depends on fire flow system alternate) **to pay for the difference of PCWA construction cost compared to the onsite system construction cost.**

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FIGURES

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N
Project Site
Antelope Canal
Agency Easements
Proposed Location of Water Services
031-220-061
032-124-080
Allen Lane
Proposed Location of New Agency Waterline
Clark Tunnel Road
Proposed Connection To Agency's Water System
English Colony Way
Skyview Dr
Ridgeview Ln
Callison Rd
Peach Tree Ln
Konkel Ct
Taylor Rd
Orange Hill Ln
Sisley Rd
Goulart Ranch Rd
Union Pacific
Rainbow Ln
Heritage Ln
Valley Springs Rd
Logan Ln
Seay Ln
Grant Rd
Prairie Ct
Gold Rush Way
Frontier Ct
Jade Ln
Butler Rd
Jasper Rd
Garcia Ct
Owen Ct
Palmcrest Ln
Bryan Ln
Morgan Canal
Aguilar Ln
Tow Ct
Kite Hawk Pl
Covey
Clark Tunnel Rd
1,000 500 0 1,000 Feet
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Es
OpenStreetMap contributors, and the GIS User Community

APPENDIX A

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A. Persons Served by Public Well:

Employees & Residents per Day								AVERAGE		
Employee Location	Day of the Week									Total ADD
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	persons/day/wk	gpd/person	gpd
Vineyard Operations	0	2	2	2	2	2	0	1.43	15	21
Winery Operation	0	2	2	2	2	2	0	1.43	20	29
Tasting Room	3	1	1	1	2	2	3	1.86	20	37
Restaurant	4	3	3	3	3	3	4	3.29	15	49
Agricultural Promotional Event	0	0	4	4	0	4	4	2.29	15	34
Special Event	0	0	0	0	0	0	6	0.86	15	13
Maintenance	1	1	1	1	1	1	1	1.00	30	30
Administrative	0	2	2	2	2	2	0	1.43	30	43
Residence guests										
Residence	4	4	4	4	4	4	4	4.00	75	300
Total Employees & residents	12	15	19	19	16	20	22	17.57		556

Patrons/Visitors per Day								AVERAGE		
Patron/Visitor Location	Day of the week									Total ADD
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	persons/day/wk	gpd/person	gpd
Tasting Room & Restaurant	50	17	17	17	25	25	50	28.57	15	429
Agricultural Promotional Event	0	0	75	50	0	75	50	b)		
Special Event	0	0	0	0	0	0	200	b)		
Total without Agricultural Promotional and Sepcial Events, see a)&b) as ADD									ADD =	985
Total MDD = 2.25 times, c) ADD, therefore employee/visitor/guests portion 0f MDD =										**2,216**
b) Special Event, MDD	0	0	0	0	0	0	200	15	gpd MDD =	**3,000**
Total MDD with Special Event and no winery										**5,216**

B. Estimated Wine making facility (employees included above)

Steamer and hot water pressure to equipment:

	Estimated wine production			
Wine cases/year	20,000	to	25,000	
Wine bottles/case	12			
Liters wine/case	9			
gallons/liter	0.2642			
gallons wine/case	2.38			
gallons/year	47,551	to	59,439	production
Gallons of cleaning required estimated =			2	gallons water/gallon wine produced
total gallons/year	95,102	to	118,877	cleaning water needed
cleaning days/year	91			
Max month, gpd	1,045	to	1,306	MDD factor, d) 1.5 times, d) Max month= Winery MDD = **1,960**

C. GRAND TOTAL	employees, visitors, guests, wine production water	**MDD = gpd =**	**7,176**
		PHD, e) = gph =	**448**
		gpm =	**7.47**

Notes:

a) Irrigation facilities use PCWA ditch water

b) The Agricultural Promotion & Special Event don't occur at same time, and thus the Special Event governs for MDD visitors

c) California Chapter 15 Water Works Standards, Section 64554(b)3C

d) California Chapter 15 Water Works Standards, Section 64554(b)2C

e) California Chapter 15 Water Works Standards, Section 64554(b)3D

APPENDIX B

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PCWA
water • energy • stewardship

PLACER COUNTY WATER AGENCY
SINCE 1957
BUSINESS CENTER
144 Ferguson Road
MAIL
P.O. Box 6570
Auburn, CA 95604
PHONE
530.823.4850
800.464.0030
WWW.PCWA.NET

May 6, 2020
File No: WA/Penryn
Map No. 29-D-01

Evan Mackenzie
BEM, Inc.
4780 Rocklin Road
Rocklin CA 95677

SUBJECT: Water Availability for 7616 Callison Lane and 7535 Ridgeview Lane, Penryn

Dear Mr. Mackenzie:

This letter is written in response to your water availability request dated April 2, 2020 and is intended to apprise you of the current status of water availability from the Agency's treated water system for the properties located at 7616 Callison Road and 7535 Ridgeview Lane, Penryn; APNs 031-220-061 & 032-124-080. The Agency does not reserve water for prospective customers and this letter in no way confers any right or entitlement to receive water service in the future. The Agency makes commitments for service only upon execution of a facilities agreement or Agency approved infill application, and the payment of all fees and charges required by the Agency.

There is no Agency treated water service to the above-mentioned parcels. Due to the elevation of the subject parcels water can only be made available from the Agency's 18-inch treated water main located in English Colony Way at the intersection of Butler Road which is almost two miles away from the parcel service location which would be end of Allen Lane. In order to obtain service, the developer will have to enter into a facilities agreement with the Agency to provide on-site or off-site pipelines or other facilities that are needed to supply water for domestic or fire protection purposes, and pay all fees and charges required by the Agency including the Water Connection Charges. Since the elevation of portions of the parcels are too high to provide adequate water pressure from the Agency's facilities, private onsite pumps and storage would be required.

There are Agency easements Placer County Recorder Document Numbers 2007-0122612, 2007-0122613 & 2007-0122614 for the future Ophir Water Treatment Plant Pipeline that traverse APN 031-220-061. The easements are intended for the installation of a large diameter water transmission main when the Agency's Ophir Water Treatment Plant has been constructed. Please carefully review these documents to gain a full understanding the limitations of what

can be improved within these areas. Water could be made available from this pipeline in the future after it has been constructed and placed into service.

The Agency's Antelope Canal traverses APN 031-220-061. Please note that the minimum watercourse setback is 100' from permanent streams and man-made canals. Both subject properties are currently being served untreated irrigation water by the Agency. Several surrounding properties are served by the Agency from this canal. Private raw water pipe from the canal may exist across the subject property. Service to these other customers that may traverse the property shall be protected. The Agency reserves the right to require a dedicated easement over existing facilities and should be provided the opportunity to comment on tentative maps if the parcel is to be split. **WARNING: Raw Untreated Water is Unfit for Human Consumption.**

All water availability is subject to the limitations described above and the prior use by existing customers. If you have any questions, please call me at the Engineering Division at (530) 823-4886.

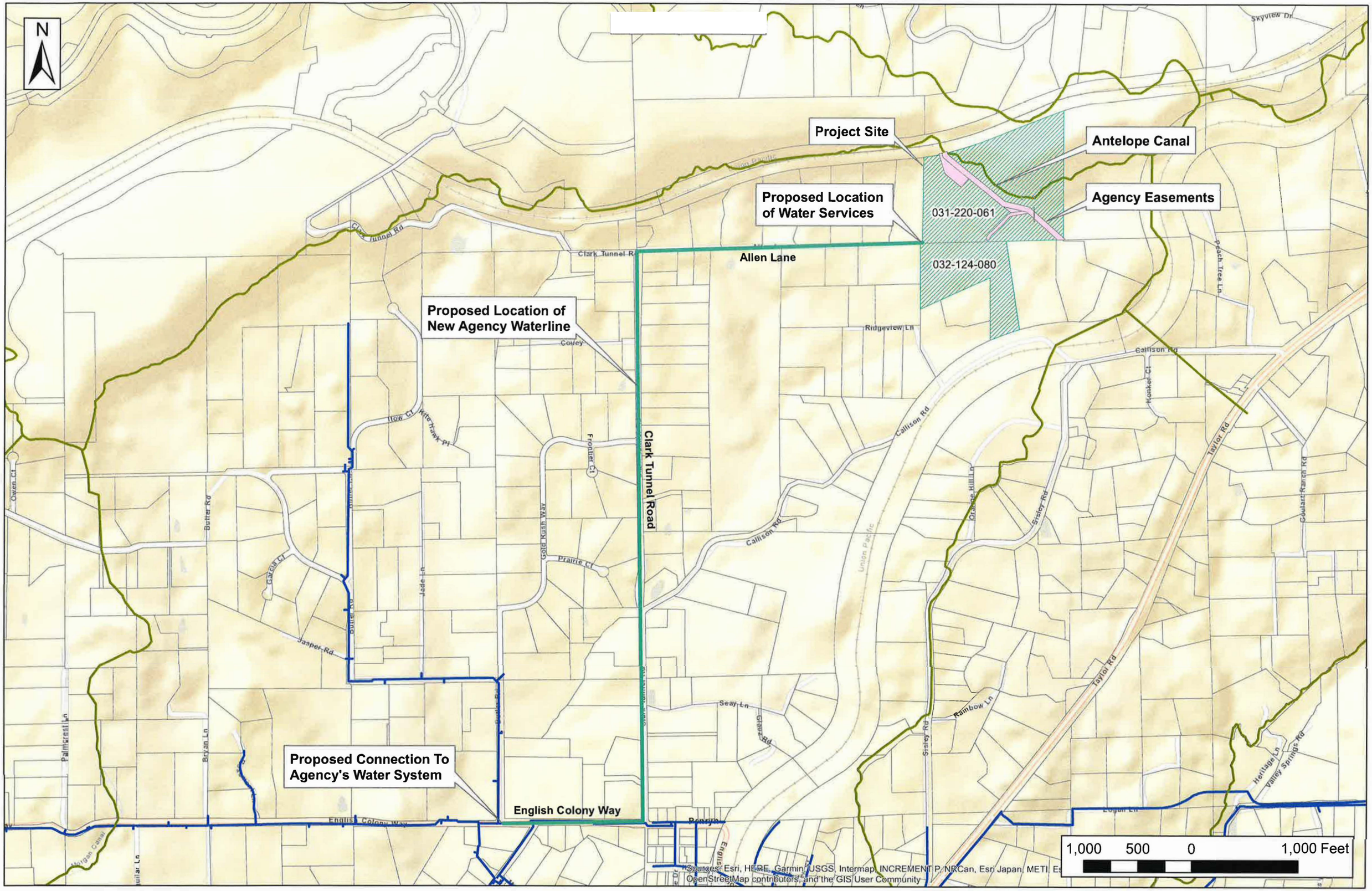
Sincerely,

Richard Wirth
Assistant Engineer

RW:ts

pc: Daryl Hensler
Ken Yunk
Lance Hartung
Field Services
Customer Service

Enc: Location Map


N
Project Site
Antelope Canal
Agency Easements
Proposed Location of Water Services
031-220-061
032-124-080
Allen Lane
Proposed Location of New Agency Waterline
Clark Tunnel Road
Proposed Connection To Agency's Water System
English Colony Way
Skyview Dr
Ridgeview Ln
Callison Rd
Peach Tree Ln
Konkel Ct
Taylor Rd
Orange Hill Ln
Sisley Rd
Goulart Ranch Rd
Union Pacific
Rainbow Ln
Heritage Ln
Valley Springs Rd
Logan Ln
Seay Ln
Grant Rd
Prairie Ct
Gold Rush Way
Frontier Ct
Jade Ln
Butler Rd
Jasper Rd
Garcia Ct
Owen Ct
Palmcrest Ln
Bryan Ln
Morgan Canal
Aguilar Ln
Tow Ct
Kite Hawk Pl
Covey
Clark Tunnel Rd
1,000 500 0 1,000 Feet
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Es
OpenStreetMap contributors, and the GIS User Community

APPENDIX C

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TABLE Water line flows/head loss
TABLE FORCE MAIN
Winery, Penryn

V = 1.318*Chw*(R^0.63)*S^0.54
Q = V*A
WHERE Chw = 140 or 140

Chw	DIA inches	A sq ft	HL SLOPE ft/ft	V ft/sec	Q cfs	Q gpd	Q gpm	Q mgd	pressure loss, psi/ft	FM len 9225	static pressure, psi at site	static pressure, psi @ English Colony	pressure Loss el change, psi	At gpm	residual site psi
140	6	0.20	0.02644	7.00	1.37	888,266	616.9	0.89	0.01145		40	170	130	617	-203.9
140	8	0.35	0.01890	7.00	2.44	1,579,140	1096.6	1.58	0.00818		40	170	130	1097	-134.4
140	12	0.79	0.01178	7.00	5.50	3,553,066	2467.4	3.55	0.00510		40	170	130	2467	-68.6
140	16	1.40	0.00842	7.00	9.77	6,316,562	4386.5	6.32	0.00365		40	170	130	4387	-37.7
140	6	0.20	0.00109	1.25	0.25	158,619	110.2	0.16	0.00047		40	170	130	110	30.0
140	8	0.35	0.00108	1.49	0.52	336,131	233.4	0.34	0.00047		40	170	130	233	30.1
140	12	0.79	0.00107	1.92	1.51	974,555	676.8	0.97	0.00046		40	170	130	677	30.1
140	16	1.40	0.00108	2.31	3.23	2,084,465	1447.5	2.08	0.00047		40	170	130	1448	30.0
140	18	1.77	0.00108	2.49	4.40	2,843,722	1974.8	2.84	0.00047		40	170	130	1975	30.0
140	20	2.18	0.00107	2.65	5.78	3,736,359	2594.7	3.74	0.00047		40	170	130	2595	30.1
140	1	0.01	0.21383	7.00	0.04	24,674	17.1	0.02	0.09259						
140	1.5	0.01	0.13324	7.00	0.09	55,517	38.6	0.06	0.05769	**Service line capacities at V = 7'/sec**					
140	2	0.02	0.09525	7.00	0.15	98,696	68.5	0.10	0.04124						
140	2.5	0.03	0.07342	7.00	0.24	154,213	107.1	0.15	0.03179						

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APPENDIX D

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Table	**6" no fire flow**				
Winery					
Water Line Construction & Connection to PCWA					
As Minimum size without fire flow capability.				**6" line**	
July 29, 2020					
Item	Description	Quantity		Unit cost	Total
A. Construction, 6" extension, @site 110 gpm, 30 psi					
1	Connection to PCWA	1	LS	$8,000	$8,000
2	6" Line extension	9225	LF	$80	$738,000
3	18" butterfly valve	1	EA	$8,000	$8,000
4	6" gate valves	6	EA	$1,500	$9,000
5	6" blow offs, a)	0	EA		$0
6	2" ARV	3	EA	$1,500	$4,500
7	Fire hydrant w/valve&line	4	EA	$5,000	$20,000
8	1" water meter & service line	2	EA	$2,500	$5,000
9	1" reduced pressure backflow	2	EA	$2,500	$5,000
10	Disininfection & testing	1	LS	$15,000	$15,000
11	Onsite booster pump	1	LS	$6,000	$6,000
	Total constuction cost				$818,500
	contingency			20%	$163,700
	Total construction cost				$982,200
B. Other costs					
1	Survey, design, improvement plans, bids			6%	$58,932
2	Construction stake and manage, engineering			3%	$29,466
3	PCWA plan ck inspection fee				$100,860
4	County Encroach permit				$2,500
5	Penryn plan ck inspection fee				$2,500
6	PCWA connection fee, b)				$120,671
7	PCWA bond required			5%	$49,110
	Total other costs				$364,039
Grand total estimated construction cost and fees, rounded					$1,346,000
Notes:					
a)	Fire hydrants used in place of blow offs				
b)	Connection fee				
	Total maximum day demand MDD			7,176	gallons
	1 unit =			1150	gallons
	Total units for site			6.24	units
	Zone 6, fee/unit			$ 19,339	
	Total connection fee			$ 120,671	

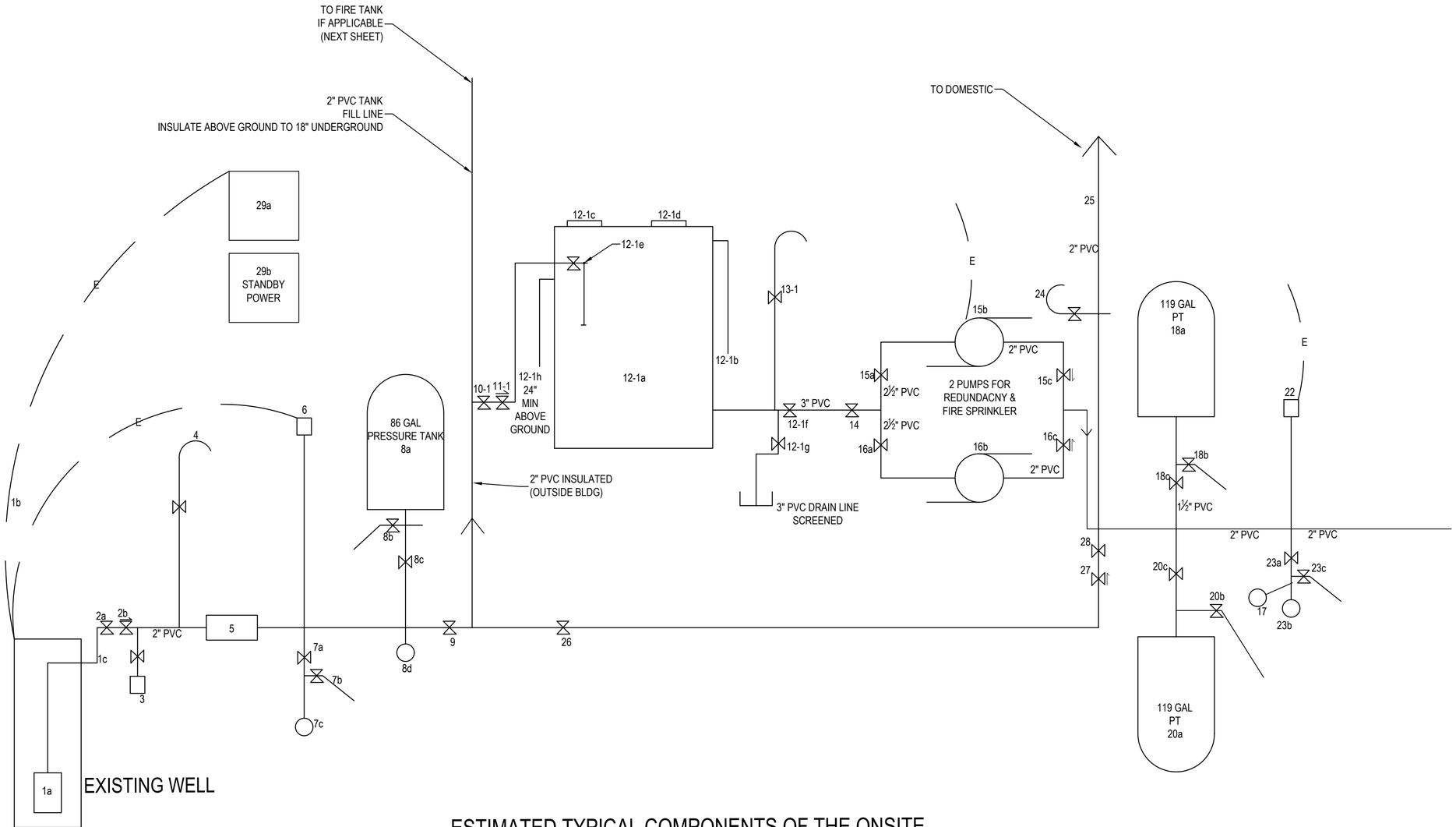
Table	**12" with 500 gpm fire flow**				
Winery					
Water Line Construction & Connection to PCWA					
As Minimum size without fire flow capability.				**12" line**	
July 29, 2020					
Item	Description	Quantity		Unit cost	Total
A. Construction,12" extension, @site 677 gpm, 30 psi					
1	Connection to PCWA	1	LS	$10,000	$10,000
2	12" Line extension	9225	LF	$200	$1,845,000
3	18" butterfly valve	1	EA	$8,000	$8,000
4	12" butterfly valves	6	EA	$3,000	$18,000
5	6" blow offs, a)	0	EA		$0
6	2" ARV	3	EA	$1,500	$4,500
7	Fire hydrant w/valve&line	4	EA	$5,000	$20,000
8	1" water meter & service line	2	EA	$2,500	$5,000
9	1" reduced pressure backflow	2	EA	$2,500	$5,000
10	Disininfection & testing	1	LS	$15,000	$15,000
11	Onsite booster pump	1	LS	$6,000	$6,000
	Total constuction cost				$1,936,500
	contingency			20%	$387,300
	Total construction cost				$2,323,800
B. Other costs					
1	Survey, design, improvement plans, bids			6%	$139,428
2	Construction stake and manage, engineering			3%	$69,714
3	PCWA plan ck inspection fee				$235,020
4	County Encroach permit				$2,500
5	Penryn plan ck inspection fee				$2,500
6	PCWA connection fee, b)				$120,671
7	PCWA bond required			5%	$116,190
	Total other costs				$686,023
Grand total estimated construction cost and fees, rounded					$3,010,000
Notes:					
a)	Fire hydrants used in place of blow offs				
b)	Connection fee				
	Total maximum day demand MDD			7,176	gallons
	1 unit =			1150	gallons
	Total units for site			6.24	units
	Zone 6, fee/unit			$ 19,339	
	Total connection fee			$ 120,671	

Table	**16" with 1500 gpm fire flow**				
Winery					
Water Line Construction & Connection to PCWA					
As Minimum size without fire flow capability.				**16" line**	
July 29, 2020					
Item	Description	Quantity		Unit cost	Total
A. Construction, 16" extension, @site 1448 gpm, 30 psi					
1	Connection to PCWA	1	LS	$10,000	$10,000
2	16" Line extension	9225	LF	$300	$2,767,500
3	18" butterfly valve	1	EA	$8,000	$8,000
4	16" butterfly valves	6	EA	$6,000	$36,000
5	6" blow offs, a)	0	EA		$0
6	2" ARV	3	EA	$1,500	$4,500
7	Fire hydrant w/valve&line	4	EA	$5,000	$20,000
8	1" water meter & service line	2	EA	$2,500	$5,000
9	1" reduced pressure backflow	2	EA	$2,500	$5,000
10	Disininfection & testing	1	LS	$15,000	$15,000
11	Onsite booster pump	1	LS	$6,000	$6,000
	Total constuction cost				$2,877,000
	contingency			20%	$575,400
	Total construction cost				$3,452,400
B. Other costs					
1	Survey, design, improvement plans, bids			6%	$207,144
2	Construction stake and manage, engineering			3%	$103,572
3	PCWA plan ck inspection fee				$347,880
4	County Encroach permit				$2,500
5	Penryn FD plan ck inspection fee				$2,500
6	PCWA connection fee, b)				$120,671
7	PCWA bond required			5%	$172,620
	Total other costs				$956,887
Grand total estimated construction cost and fees, rounded					$4,409,000
Notes:					
a)	Fire hydrants used in place of blow offs				
b)	Connection fee				
	Total maximum day demand MDD			7,176	gallons
	1 unit =			1150	gallons
	Total units for site			6.24	units
	Zone 6, fee/unit			$ 19,339	
	Total connection fee			$ 120,671	

Approximate Total ADD with all demands							
	ITEM	per yr	gpd	days/yr	Total gal/yr		
non special events		365	985	365	359,521		
special events		12	3,000	12	36,000		
	ag events	30	750	30	22,500		
	winery	91	1,306	91	118,877		
		Total water/year approx			536,899	gallons	
				ave/month	44,742	gpmonth	
				100 cf =	59.81	100s cf/month	
PCWA average monthly base and use rate cost							
	1" meter base rate commercial				$ 42.16	per month	
capacity& renewal		$ 15.16	per MDDcapot	6.24	$ 94.60		
use rate/100CF		$ 1.67	per 100cf/m =	59.81	$ 99.89	useage cost/month	
					$ 236.65	ave monthly cost	
					$2,840.00	Annual cost	

APPENDIX E

1188 East Main Street, Grass Valley, CA 95945
Phone: (530) 273-7284 | Fax: (530) 273-9507 | www.cranmerengineeringinc.com



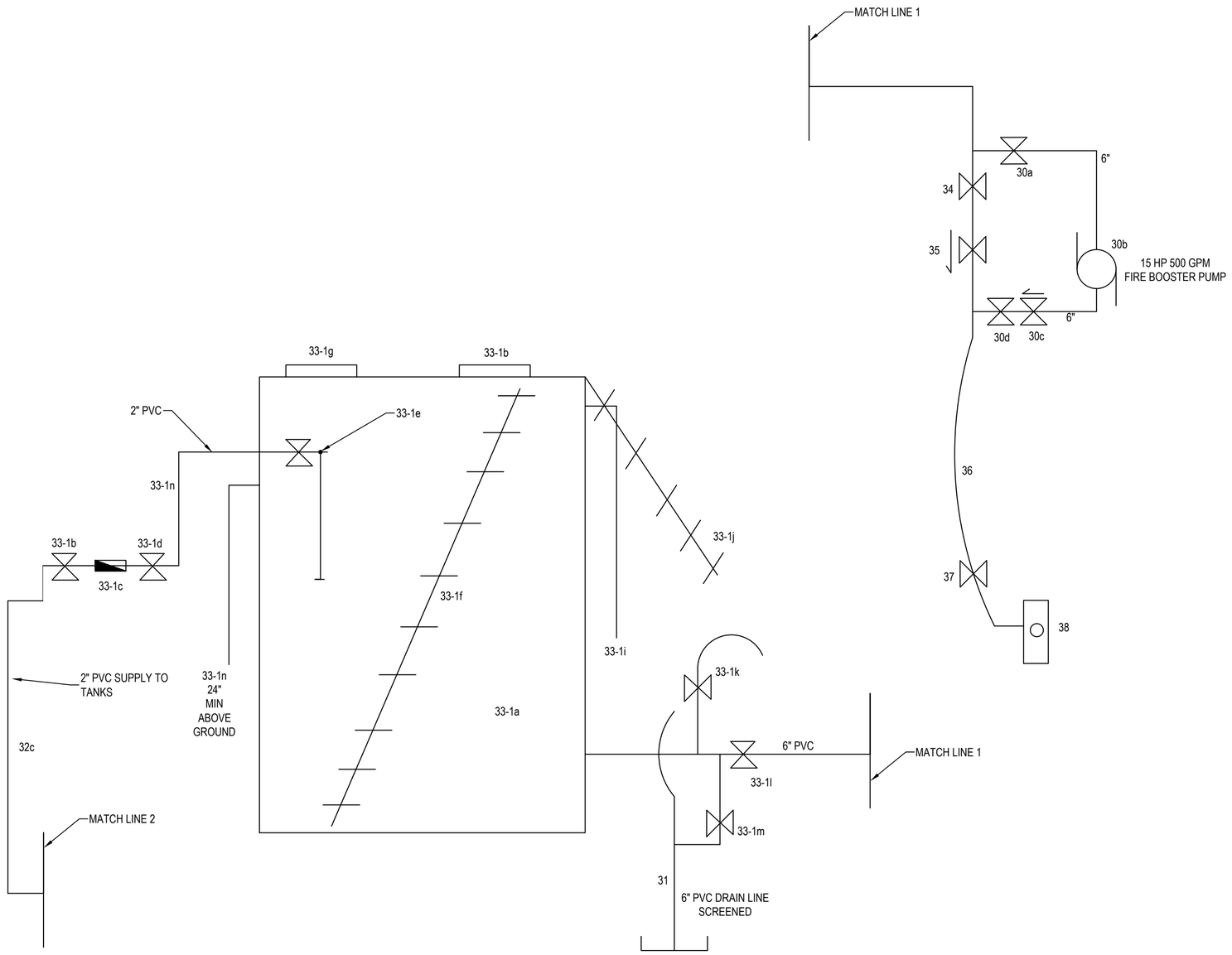
ESTIMATED TYPICAL COMPONENTS OF THE ONSITE
DOMESTIC PUBLIC WATER SYSTEM

NOT TO SCALE

CRANMER ENGINEERING, INC.
1188 EAST MAIN STREET
GRASS VALLEY, CA 95945

MIMA CAPITAL ESTIMATED WATER SYSTEM IMPROVEMENTS

		DATE: 2020	JOB NO.: 20-040
			SHEET 1 OF 2 SHEETS



NOT TO SCALE

CRANMER ENGINEERING, INC.
1188 EAST MAIN STREET
GRASS VALLEY, CA 95945

MIMA CAPITAL ESTIMATED WATER SYSTEM IMPROVEMENTS

		DATE: 2020	JOB NO.: 20-040
			SHEET 2 OF 2 SHEETS

Mima Capital Domestic Public Water System Typical Components List					
Item No.	Size	General Description	Manufacturer	Model # , Part/Serial No.	Item No.
1a	3HP	Well pump, 1 Ph, 230V	Goulds	45GS30	1a
1b		Electric from pump to building in conduit			1b
1c	2"	PVC, Sch 40			1c
1d		Electric breaker box, w/breaker to well, 1 duplex recepticle			1d
2a	2"	Ball valve			2a
2b	2"	Check Valve			2b
3	2 x 1/2 T	With 1/2" ball valve and cap for Chlorine injection if needed in future			3
4	1/4"	Sample tap			4
5	1 1/2"	Water meter			5
6		Pressure switch, 60/80			6
7a	2"	Ball valve			7a
7b	2"	Ball valve to drain			7b
7c		Pressure gauge			7c
8a	86 gal	Pressure Tank	Amtrol	WX-252	8a
8b	3/4"	Hose bibb for tank drain			8b
8c	11/4"	Ball valve			8c
8d		Pressure relief valve			8d
9	2"	Ball valve			9
10-1	2"	Ball valve			10-1
11-1	2"	Check Valve			11-1
13-1	1/4"	Sample tap			13-1
14	3"	Ball valve			14
15a	2 1/2"	Ball valve			15a
15b	3 HP	30 gpm Booster pump, 1 Ph, 230 V	Goulds	45HB	15b
15c	2"	Check Valve			15c
16a	2 1/2"	Ball valve			16a
16b	3 HP	30 gpm Booster pump, 1 Ph, 230 V	Goulds	45HB	16b
16c	2"	Check Valve			16c
17		Pressure relief valve			17
18a	119 gal	Pressure Tank	Amtrol	WX-350	18a
18b	3/4"	Hose bibb for tank drain			18b
18c	11/2"	Ball valve			18c
20a	119 gal	Pressure Tank	Amtrol	WX-350	20a
20b	3/4"	Hose bibb for tank drain			20b
20c	1 1/2"	Ball Valve			20c
22		Pressure switch, 35/55			22
23a	1 1/2"	Ball valve			23a
23b		Pressure gauge			23b
23c	3/4"	Hose bibb for drain			23c
24	1/4"	Sample tap			24
25	2" dia	PVC, Sch 40 to existing old pipe			25
26	2"	Ball valve			26
27	2"	Check Valve			27
28	2"	Ball valve, normal off			28
29a		Electric and Control panels, see Note c on plans)			29a
29b	100a, 230/240V	Standby generator, air cooled, with cold weather kit; 100 gal. propane tank, auto transfer,	Generac Guardian	7042	29b
31	6"	PVC Drain Line, screened outlet			31
33-1a		Minimum steel tank, bolted or galvanized			33-1a
33-1b	2"	Ball valve			33-1b
33-1c	2"	Reduced pressure backflow device			33-1c
33-1d	2"	Ball valve			33-1d
33-1e	2"	Shut off valve by floats	Vortex, Jobe	VXVD2	33-1e
33-1f		Inside tank ladder			33-1f
33-1g		Manway access			33-1g
33-1h		Screened vent			33-1h
33-1i		Site gage			33-1i
33-1j		Outside tank ladder to Manway access			33-1j
33-1k	1/4"	Sample tap			33-1k
33-1l		Gate valve			33-1l
33-1m		Gate valve to tank drain			33-1m
33-1n		PVC overlow insulated line above ground to screened end outlet			33-1n
34		Gate Valve			34
35		Check Valve			35
36		PVC Schedule 40			36
37		Gate valve			37
38		Fire hydrant, dry type			38

SIMPLIFIED CAPITAL IMPROVEMENT PLAN

Date: 7/29/2020
System ID No.:
System Name: **Mima Capital LLC, Penryn**
Zero fire flow
Service Connections: 1

*Enter information only in shaded cells

QTY	COMPONENT	UNIT COST	INSTALLED COST	AVG LIFE, YEARS	ANNUAL RESERVE	MONTHLY RESERVE	MONTHLY RESERVE PER CUSTOMER
1	Drilled Well, 8", steel casing Depth: 240	244	58560	50	1171.20	97.60	97.60
1	Wellhead Electrical Controls	5000	5000	15	333.33	27.78	27.78
1	Submersible Pump, 3 HP	5000	5000	15	333.33	27.78	27.78
2	Booster Pump Station, 3 HP	2400	4800	15	320.00	26.67	26.67
1	Booster Pump Station Electrical Controls	900	900	15	60.00	5.00	5.00
1	Pressure Tank Gallons: 86	7.0	602	15	40.13	3.34	3.34
2	Pressure Tank Gallons: 119	8.0	1904	15	126.93	10.58	10.58
2	Storage Tank, Plastic Gallons: 3600	1.5	10800	15	720.00	60.00	60.00
1	Master Meter, 1 1/2"	750	750	15	50.00	4.17	4.17
1	2" x 1/2" T future CL connection, if needed.	60	60	30	2.00	0.17	0.17
400	Pipe w/ sand bedding, 2" (Enter linear feet for quantity)	35	14000	50	280.00	23.33	23.33
3	Ball Valve, 1 1/2"	30	90	15	6.00	0.50	0.50
2	Ball Valve, 2 1/2"	50	100	15	6.67	0.56	0.56
3	Ball Valve, 3"	80	240	15	16.00	1.33	1.33
2	Pressure swiitch	200	400	20	20.00	1.67	1.67
1	3" check valve	120	120	15	8.00	0.67	0.67
1	1 1/4" ball valve	20	20	15	1.33	0.11	0.11
7	2" ball valve	40	280	15	18.67	1.56	1.56
4	2" check valve	45	180	15	12.00	1.00	1.00
1	12 KW standby generator and propane tank	8000	8000	10	800.00	66.67	66.67
3	test cocks assemblies	60	180	20	9.00	0.75	0.75
2	Pressure gage	15	30	20	1.50	0.13	0.13
4	3/4" hose bibb	40	160	20	8.00	0.67	0.67
2	pressure relief valve	100	200	20	10.00	0.83	0.83
1	miscellaneous pipe fittings and supports	3000	3000	40	75.00	6.25	6.25
240	Square feet service building on concrete slab	90	21600	40	540.00	45.00	45.00
1	disinfection and startup	4000	4000	40	100.00	8.33	8.33
20%	contingency	140976	28195.2	30	939.84	78.32	78.32
	TOTALS:		$169,171.20		$3,465.60	$288.80	$288.80

Report Prepared by (Title): _____ Thomas E. Leland, Chief Engineer, C14320 Date: July 29, 2020

NOTE: Installed costs are averages, and include all materials and contracted labor and equipment.

FIVE YEAR BUDGET PROJECTION

Transient Noncommunity Water System INFLATION FACTOR (%) - 2.3

Mima Capital LLC, Penryn

Zero fire flow System Name: PWS I.D. Number:

*Enter information only in shaded cells

LINE	EXPENSES	2020	2021	2022	2023	2024
1	**OPERATIONS & MAINTENANCE**					
2	Salaries and benefits	2000.00	2045.00	2091.01	2138.06	2186.17
3	Contract operation and maintenance & reports	2700.00	2760.75	2822.87	2886.38	2951.32
4	Power and other utilities	2600.00	2658.50	2718.32	2779.48	2842.02
5	Fees	1000.00	1022.50	1045.51	1069.03	1093.08
6	Treatment chemicals	0.00	0.00	0.00	0.00	0.00
7	Lab testing	540.00	552.15	564.57	577.28	590.26
8	Lab testing items every 3 years	500.00	511.25	522.75	534.52	546.54
9	Annual CCR & EARs reports	315.00	322.09	329.33	336.74	344.32
10	Materials, supplies, and parts	300.00	306.75	313.65	320.71	327.92
11	Miscellaneous	150.00	153.38	156.83	160.35	163.96
12			0.00	0.00	0.00	0.00
13			0.00	0.00	0.00	0.00
14	**Total Operation and Maintenance**	**$10,105.00**	**$10,332.36**	**$10,564.84**	**$10,802.55**	**$11,045.61**
15						
16	**GENERAL & ADMINISTRATIVE**					
17	Engineering and professional services, incld above		0.00	0.00	0.00	0.00
18	Depreciation and amortization		0.00	0.00	0.00	0.00
19	CIP Reserve (from Sheet 2, Column J Total)	3465.60	3543.58	3623.31	3704.83	3788.19
20	Insurance	500.00	511.25	522.75	534.52	546.54
21			0.00	0.00	0.00	0.00
22			0.00	0.00	0.00	0.00
23	**Total General and Administrative, annual**	**$3,965.60**	**$4,054.83**	**$4,146.06**	**$4,239.35**	**$4,334.73**
24						
25	**FIRST YEAR COSTS ONLY**					
26	Survey, design, impovement plans	$10,150.27				
27	Construction stake and manage	$5,075.14				
28	County Plan check & inspection fees	$8,458.56				
29	County Encroachment fee	$0.00				
30	Penryn FD plan ck inspection fee	$2,000.00				
31	PHS Application fee and TMF	$10,000.00				
32						
33	**Total first year only costs**	**$25,533.70**				
34						
35	**TOTAL EXPENSES**	**$39,604.30**	**$14,387.19**	**$14,710.90**	**$15,041.90**	**$15,380.34**

Report Prepared by: Thomas E. Leland, C14320 Date: July 29, 2020

Title: Chief Engineer

Annual costs included if applicable per code section	code
Water treatmetnt chemical costs	64590
Raw water chemical monitoring, sampling, analys	64431 to 64445.2
Bacterial costs untreated water	644430
Bacterial costs treated water	64421 to 64430, Table 64423-A
BacT and ENP plans	64463 to 64466
Lead/copper monitoring & analysis	64670 to 64690.80, Table 64675-A
Disinfection byproducts cost etc.	64530 to64537.6, Table64534.2-A
Costomer water quality complaint program	64470
Flush valve, meter maintain, maintain maps	64604
X connection and backflow tests	Title 17, 7583-7605
Licensed operator costs etc.	64413.1 to 64413.7
Written rpts of system maintenance ie line breaks	64580, 64582, 64583
Plan studies, amendments, growth	64558, 64556
Consumer confidence report	64480 - 94483
EARS	H&Safety Code 116530
Equipment records, life and fund replacement	
Metering and billing staff costs	
Drought emergency and notices of BacT failures	
Buisness licenses, permit fee, compliance	H&Safety Code 116565 & 116577
Work space for staff, records, chemicals	64470, 64423.1
Insurances etc.	
Knowlegeable staff, costs, financial controls	H&Safety Code 116540

SIMPLIFIED CAPITAL IMPROVEMENT PLAN

Date: 7/29/2020
System ID No.:
System Name: **Mima Capital LLC, Penryn**
Service Connections: 1
500 gpm fire flow
*Enter information only in shaded cells

QTY	COMPONENT	UNIT COST	INSTALLED COST	AVG LIFE, YEARS	ANNUAL RESERVE	MONTHLY RESERVE	MONTHLY RESERVE PER CUSTOMER
1	Drilled Well, 8", steel casing Depth: 240	244	58560	50	1171.20	97.60	97.60
1	Wellhead Electrical Controls	5000	5000	15	333.33	27.78	27.78
1	Submersible Pump, 3 HP	5000	5000	15	333.33	27.78	27.78
2	Booster Pump Station, 3 HP	2400	4800	15	320.00	26.67	26.67
1	Booster Pump Station Electrical Controls	900	900	15	60.00	5.00	5.00
1	Pressure Tank Gallons: 86	7.0	602	15	40.13	3.34	3.34
2	Pressure Tank Gallons: 119	8.0	1904	15	126.93	10.58	10.58
2	Storage Tank, Plastic Gallons: 3600	1.5	10800	15	720.00	60.00	60.00
1	Master Meter, 1 1/2"	750	750	15	50.00	4.17	4.17
1	2" x 1/2" T future CL connection, if needed.	60	60	30	2.00	0.17	0.17
400	Pipe w/ sand bedding, 2" (Enter linear feet for quantity)	35	14000	50	280.00	23.33	23.33
3	Ball Valve, 1 1/2"	30	90	15	6.00	0.50	0.50
2	Ball Valve, 2 1/2"	50	100	15	6.67	0.56	0.56
3	Ball Valve, 3"	80	240	15	16.00	1.33	1.33
2	Pressure swiitch	200	400	20	20.00	1.67	1.67
1	3" check valve	120	120	15	8.00	0.67	0.67
1	1 1/4" ball valve	20	20	15	1.33	0.11	0.11
7	2" ball valve	40	280	15	18.67	1.56	1.56
4	2" check valve	45	180	15	12.00	1.00	1.00
1	12 KW standby generator and propane tank	8000	8000	10	800.00	66.67	66.67
3	test cocks assemblies	60	180	20	9.00	0.75	0.75
2	Pressure gage	15	30	20	1.50	0.13	0.13
4	3/4" hose bibb	40	160	20	8.00	0.67	0.67
2	pressure relief valve	100	200	20	10.00	0.83	0.83
1	miscellaneous pipe fittings and supports	3000	3000	40	75.00	6.25	6.25
240	Square feet service building on concrete slab	90	21600	40	540.00	45.00	45.00
Fire Storage Tank, Line, Hydrant and facilities							
1	2" tank gate valves	80	80	15	5.33	0.44	0.44
1	2" inslulated tank fill pipe	50	50	40	1.25	0.10	0.10
1	2" ball valve	40	40	15	2.67	0.22	0.22
1	1" reduced pressure backflow device	300	300	15	20.00	1.67	1.67
1	60,000 gallon fire storage tank	130000	130000	30	4333.33	361.11	361.11
1	500 gpm fire booster pump	25000	25000	15	1666.67	138.89	138.89
200	6" fire hydrant line	80	16000	30	533.33	44.44	44.44
1	6" FH gate valve	5000	5000	15	333.33	27.78	27.78
1	disinfection and startup	10000	10000	40	250.00	20.83	20.83
20%	contingency	323446	64689	30	2156.31	179.69	179.69
	TOTALS:		$388,135.20		$3,465.60	$288.80	$288.80

Report Prepared by (Title): _____ Thomas E. Leland, Chief Engineer, C14320 Date: July 29, 2020

NOTE: Installed costs are averages, and include all materials and contracted labor and equipment.

FIVE YEAR BUDGET PROJECTION

Transient Noncommunity Water System INFLATION FACTOR (%) - 2.3

Mima Capital LLC, Penryn

500 gpm fire 1 System Name: PWS I.D. Number:

*Enter information only in shaded cells

LINE	EXPENSES	2020	2021	2022	2023	2024
1	**OPERATIONS & MAINTENANCE**					
2	Salaries and benefits	2500.00	2556.25	2613.77	2672.58	2732.71
3	Contract operation and maintenance & reports	2700.00	2760.75	2822.87	2886.38	2951.32
4	Power and other utilities	2600.00	2658.50	2718.32	2779.48	2842.02
5	Fees	1000.00	1022.50	1045.51	1069.03	1093.08
6	Treatment chemicals	0.00	0.00	0.00	0.00	0.00
7	Lab testing	540.00	552.15	564.57	577.28	590.26
8	Lab testing items every 3 years	500.00	511.25	522.75	534.52	546.54
9	Annual CCR & EARs reports	315.00	322.09	329.33	336.74	344.32
10	Materials, supplies, and parts	500.00	511.25	522.75	534.52	546.54
11	Miscellaneous	500.00	511.25	522.75	534.52	546.54
12			0.00	0.00	0.00	0.00
13			0.00	0.00	0.00	0.00
14	**Total Operation and Maintenance**	**$11,155.00**	**$11,405.99**	**$11,662.62**	**$11,925.03**	**$12,193.34**
15						
16	**GENERAL & ADMINISTRATIVE**					
17	Engineering and professional services, incld above		0.00	0.00	0.00	0.00
18	Depreciation and amortization		0.00	0.00	0.00	0.00
19	CIP Reserve (from Sheet 2, Column J Total)	3465.60	3543.58	3623.31	3704.83	3788.19
20	Insurance	1500.00	1533.75	1568.26	1603.55	1639.62
21			0.00	0.00	0.00	0.00
22			0.00	0.00	0.00	0.00
23	**Total General and Administrative, annual**	**$4,965.60**	**$5,077.33**	**$5,191.57**	**$5,308.38**	**$5,427.81**
24						
25	**FIRST YEAR COSTS ONLY**					
26	Survey, design, impovement plans	$23,288.11				
27	Construction stake and manage	$11,644.06				
28	County Plan check & inspection fees	$19,406.76				
29	County Encroachment fee	$0.00				
30	Penryn FD plan ck inspection fee	$2,000.00				
31	PHS Application fee and TMF	$10,000.00				
32						
33	**Total first year only costs**	**$43,050.82**				
34						
35	**TOTAL EXPENSES**	**$59,171.42**	**$16,483.31**	**$16,854.19**	**$17,233.41**	**$17,621.16**

Report Prepared by: Thomas E. Leland, C14320 Date: July 29, 2020

Title: Chief Engineer

Annual costs included if applicable per code section	code
Water treatmetnt chemical costs	64590
Raw water chemical monitoring, sampling, analys	64431 to 64445.2
Bacterial costs untreated water	644430
Bacterial costs treated water	64421 to 64430, Table 64423-A
BacT and ENP plans	64463 to 64466
Lead/copper monitoring & analysis	64670 to 64690.80, Table 64675-A
Disinfection byproducts cost etc.	64530 to64537.6, Table64534.2-A
Costomer water quality complaint program	64470
Flush valve, meter maintain, maintain maps	64604
X connection and backflow tests	Title 17, 7583-7605
Licensed operator costs etc.	64413.1 to 64413.7
Written rpts of system maintenance ie line breaks	64580, 64582, 64583
Plan studies, amendments, growth	64558, 64556
Consumer confidence report	64480 - 94483
EARS	H&Safety Code 116530
Equipment records, life and fund replacement	
Metering and billing staff costs	
Drought emergency and notices of BacT failures	
Buisness licenses, permit fee, compliance	H&Safety Code 116565 & 116577
Work space for staff, records, chemicals	64470, 64423.1
Insurances etc.	
Knowlegeable staff, costs, financial controls	H&Safety Code 116540

SIMPLIFIED CAPITAL IMPROVEMENT PLAN

Date: 7/29/2020
System ID No.:
System Name: **Mima Capital LLC, Penryn**
1500 gpm fire flow
Service Connections: 1

*Enter information only in shaded cells

QTY	COMPONENT	UNIT COST	INSTALLED COST	AVG LIFE, YEARS	ANNUAL RESERVE	MONTHLY RESERVE	MONTHLY RESERVE PER CUSTOMER
1	Drilled Well, 8", steel casing Depth: 240	244	58560	50	1171.20	97.60	97.60
1	Wellhead Electrical Controls	5000	5000	15	333.33	27.78	27.78
1	Submersible Pump, 3 HP	5000	5000	15	333.33	27.78	27.78
2	Booster Pump Station, 3 HP	2400	4800	15	320.00	26.67	26.67
1	Booster Pump Station Electrical Controls	900	900	15	60.00	5.00	5.00
1	Pressure Tank Gallons: 86	7.0	602	15	40.13	3.34	3.34
2	Pressure Tank Gallons: 119	8.0	1904	15	126.93	10.58	10.58
2	Storage Tank, Plastic Gallons: 3600	1.5	10800	15	720.00	60.00	60.00
1	Master Meter, 1 1/2"	750	750	15	50.00	4.17	4.17
1	2" x 1/2" T future CL connection, if needed.	60	60	30	2.00	0.17	0.17
400	Pipe w/ sand bedding, 2" (Enter linear feet for quantity)	35	14000	50	280.00	23.33	23.33
3	Ball Valve, 1 1/2"	30	90	15	6.00	0.50	0.50
2	Ball Valve, 2 1/2"	50	100	15	6.67	0.56	0.56
3	Ball Valve, 3"	80	240	15	16.00	1.33	1.33
2	Pressure swiitch	200	400	20	20.00	1.67	1.67
1	3" check valve	120	120	15	8.00	0.67	0.67
1	1 1/4" ball valve	20	20	15	1.33	0.11	0.11
7	2" ball valve	40	280	15	18.67	1.56	1.56
4	2" check valve	45	180	15	12.00	1.00	1.00
1	12 KW standby generator and propane tank	8000	8000	10	800.00	66.67	66.67
3	test cocks assemblies	60	180	20	9.00	0.75	0.75
2	Pressure gage	15	30	20	1.50	0.13	0.13
4	3/4" hose bibb	40	160	20	8.00	0.67	0.67
2	pressure relief valve	100	200	20	10.00	0.83	0.83
1	miscellaneous pipe fittings and supports	3000	3000	40	75.00	6.25	6.25
240	Square feet service building on concrete slab	90	21600	40	540.00	45.00	45.00
Fire Storage Tank, Line, Hydrant and facilities							
1	2" tank gate valves	80	80	15	5.33	0.44	0.44
1	2" inslulated tank fill pipe	50	50	40	1.25	0.10	0.10
1	2" ball valve	40	40	15	2.67	0.22	0.22
1	1" reduced pressure backflow device	300	300	15	20.00	1.67	1.67
1	360,000 gallon fire storage tank	720000	720000	30	24000.00	2000.00	2000.00
1	1500 gpm fire booster pump	75000	75000	15	5000.00	416.67	416.67
200	12" fire hydrant line	200	40000	30	1333.33	111.11	111.11
1	6" FH gate valve	5000	5000	15	333.33	27.78	27.78
1	disinfection and startup	10000	10000	40	250.00	20.83	20.83
20%	contingency	987446	197489	30	6582.97	548.58	548.58
	TOTALS:		$1,184,935.20		$3,465.60	$288.80	$288.80

Report Prepared by (Title): _____ Thomas E. Leland, Chief Engineer, C14320 Date: July 29, 2020

NOTE: Installed costs are averages, and include all materials and contracted labor and equipment.

FIVE YEAR BUDGET PROJECTION

Transient Noncommunity Water System
Mima Capital LLC, Penryn

INFLATION FACTOR (%) - 2.3

1500 gpm fire System Name: PWS I.D. Number:

*Enter information only in shaded cells

LINE	EXPENSES	2020	2021	2022	2023	2024
1	**OPERATIONS & MAINTENANCE**					
2	Salaries and benefits	2500.00	2556.25	2613.77	2672.58	2732.71
3	Contract operation and maintenance & reports	2700.00	2760.75	2822.87	2886.38	2951.32
4	Power and other utilities	2600.00	2658.50	2718.32	2779.48	2842.02
5	Fees	1000.00	1022.50	1045.51	1069.03	1093.08
6	Treatment chemicals	0.00	0.00	0.00	0.00	0.00
7	Lab testing	540.00	552.15	564.57	577.28	590.26
8	Lab testing items every 3 years	500.00	511.25	522.75	534.52	546.54
9	Annual CCR & EARs reports	315.00	322.09	329.33	336.74	344.32
10	Materials, supplies, and parts	750.00	766.88	784.13	801.77	819.81
11	Miscellaneous	750.00	766.88	784.13	801.77	819.81
12			0.00	0.00	0.00	0.00
13			0.00	0.00	0.00	0.00
14	**Total Operation and Maintenance**	**$11,655.00**	**$11,917.24**	**$12,185.38**	**$12,459.55**	**$12,739.89**
15						
16	**GENERAL & ADMINISTRATIVE**					
17	Engineering and professional services, incld above		0.00	0.00	0.00	0.00
18	Depreciation and amortization		0.00	0.00	0.00	0.00
19	CIP Reserve (from Sheet 2, Column J Total)	3465.60	3543.58	3623.31	3704.83	3788.19
20	Insurance	2500.00	2556.25	2613.77	2672.58	2732.71
21			0.00	0.00	0.00	0.00
22			0.00	0.00	0.00	0.00
23	**Total General and Administrative, annual**	**$5,965.60**	**$6,099.83**	**$6,237.07**	**$6,377.41**	**$6,520.90**
24						
25	**FIRST YEAR COSTS ONLY**					
26	Survey, design, impovement plans	$71,096.11				
27	Construction stake and manage	$35,548.06				
28	County Plan check & inspection fees	$59,246.76				
29	County Encroachment fee	$0.00				
30	Penryn FD plan ck inspection fee	$2,500.00				
31	PHS Application fee and TMF	$10,000.00				
32						
33	**Total first year only costs**	**$107,294.82**				
34						
35	**TOTAL EXPENSES**	**$124,915.42**	**$18,017.06**	**$18,422.45**	**$18,836.95**	**$19,260.78**

Report Prepared by: Thomas E. Leland, C14320 Date: July 29, 2020

Title: Chief Engineer

Annual costs included if applicable per code section	code
Water treatmetnt chemical costs	64590
Raw water chemical monitoring, sampling, analys	64431 to 64445.2
Bacterial costs untreated water	644430
Bacterial costs treated water	64421 to 64430, Table 64423-A
BacT and ENP plans	64463 to 64466
Lead/copper monitoring & analysis	64670 to 64690.80, Table 64675-A
Disinfection byproducts cost etc.	64530 to64537.6, Table64534.2-A
Costomer water quality complaint program	64470
Flush valve, meter maintain, maintain maps	64604
X connection and backflow tests	Title 17, 7583-7605
Licensed operator costs etc.	64413.1 to 64413.7
Written rpts of system maintenance ie line breaks	64580, 64582, 64583
Plan studies, amendments, growth	64558, 64556
Consumer confidence report	64480 - 94483
EARS	H&Safety Code 116530
Equipment records, life and fund replacement	
Metering and billing staff costs	
Drought emergency and notices of BacT failures	
Buisness licenses, permit fee, compliance	H&Safety Code 116565 & 116577
Work space for staff, records, chemicals	64470, 64423.1
Insurances etc.	
Knowlegeable staff, costs, financial controls	H&Safety Code 116540

APPENDIX F

1188 East Main Street, Grass Valley, CA 95945
Phone: (530) 273-7284 | Fax: (530) 273-9507 | www.cranmerengineeringinc.com

RECORDING REQUESTED BY:
Chicago Title Company

When Recorded Mail Document
and Tax Statement To:
SHAWN SKAIFE and JANE LE SKAIFE
8085 CALLISON ROAD
PENRYN, CA 95663

PLACER, County Recorder
RYAN RONCO
DOC- 2016-0078697-00
CHICAGO TITLE-Recording Acct
MONDAY, SEP 19, 2016 14:59:34

MIC	$3.00	AUT	$5.00	SBS	$4.00
ERD	$1.00	RED	$1.00	REC	$13.00
ADD	$0.00	UNI	$904.20		

Ttl Pd $931.20 Rcpt # 02544337
CLK98BY282/WG/1-5

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Escrow Order No.: FSJP-6061601604

Property Address: 8085 Callison Road,
Penryn, CA
APN/Parcel ID(s): 031-220-004-510 (portion)
032-124-072-000
032-124-074-000

GRANT DEED

The undersigned grantor(s) declare(s)

☐ This transfer is exempt from the documentary transfer tax.
☑ **The documentary transfer tax is** $904.20 and is computed on:
  ☑ the full value of the interest or property conveyed.
  ☐ the full value less the liens or encumbrances remaining thereon at the time of sale.
The property is located in ☑ an Unincorporated area of **Penryn.**

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, MIMA CAPITAL, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

hereby GRANT(S) to SHAWN SKAIFE and JANE LE SKAIFE, HUSBAND AND WIFE AS COMMUNITY PROPERTY

the following described real property in the Unincorporated Area of the County of Placer, State of California:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

TOGETHER WITH EASEMENTS AS DESCRIBED IN EXHIBITS "B" AND "C" ATTACHED HERETO AND MADE A PART HEROF.

MAIL TAX STATEMENTS AS DIRECTED ABOVE

GRANT DEED
(continued)

APN/Parcel ID(s): 031-220-004-510 (portion)
032-124-072-000
032-124-074-000

Dated: September 7, 2016

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

MIMA CAPITAL, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: _____
MICHEL M. FOURNIER, MEMBER

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Placer

On 9/6/2016 before me, Julia E. Pickard, Notary Public,
(here insert name and title of the officer)

personally appeared Michel M. Fournier,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Julia E. Pickard
Signature

(Seal)

JULIA E. PICKARD
COMM. # 2051421
NOTARY PUBLIC - CALIFORNIA
PLACER COUNTY
COMM. EXPIRES JAN. 6, 2018

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 031-220-004-510 (portion), 032-124-072-000 and 032-124-074-000

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA, COUNTY OF PLACER, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

ALL THAT REAL PROPERTY SITUATED IN THE COUNTY OF PLACER, STATE OF CALIFORNIA AND BEING A PORTION OF SECTION 23 AND SECTION 26, TOWNSHIP 12 NORTH, RANGE 7 EAST, M.D.M. AND ALSO BEING ALL PORTIONS OF PARCEL ONE, TWO, AND THREE AS DESCRIBED IN THE GRANT DEED TO MIMA CAPITAL LLC, RECORDED MAY 30, 2013 AS DOC-2013-0053153-00, PLACER COUNTY OFFICIAL RECORDS. LYING EAST OF THE FOLLOWING DESCRIBED LINE:

COMMENCING AT THE SOUTHWEST CORNER OF SAID PARCEL ONE, BEING A POINT ON THE SOUTH LINE OF SAID SECTION 23; THENCE ALONG THE MOST SOUTHERLY BOUNDARY OF SAID MIMA PROPERTY, NORTH 88° 29' 30" EAST, 1,311 .22 FEET TO A POINT ON THE LINE TO BE DESCRIBED: SAID LINE TO EXTEND NORTH 00° 00' 00" EAST TO THE NORTH BOUNDARY OF SAID MIMA PROPERTY AND SOUTH 00° 00' 00" EAST TO THE SOUTH BOUNDARY OF SAID MIMA PROPERTY.

SAID LAND IS SHOWN AS RESULTANT PARCEL 2 ON THE RESOLUTION TO APPROVE MINOR BOUNDARY LINE ADJUSTMENT (PLN16-00142) RECORDED JULY 8, 2016, INSTRUMENT NO. 2016-0054571, OF OFFICIAL RECORDS. .

EXHIBIT "B"
LEGAL DESCRIPTION
PRIVATE ROAD EASEMENT

A PRIVATE ROAD EASEMENT OVER, AND ACROSS A PORTION OF RESULTANT PARCEL 1 OF THAT CERTAIN DOCUMENT RECORDED JULY 8, 2016, INSTRUMENT NO. 2016-0054571, PLACER COUNTY OFFICIAL RECORDS. SITUATED IN THE COUNTY OF PLACER, STATE OF CALIFORNIA. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID RESULTANT PARCEL 1; THENCE ALONG THE SOUTH BOUNDARY THEREOF, SOUTH 88°29'30" WEST, 714.79 FEET; THENCE LEAVING SAID SOUTH BOUNDARY ALONG THE FOLLOWING 9 COURSES:

1. THENCE NORTH 05°14'19" EAST, 17.50 FEET;
2. THENCE TO THE RIGHT ALONG THE ARC OF A TANGENT CURVE, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 45.00 FEET, A CENTRAL ANGLE OF 81°41'52", AND AN ARC LENGTH OF 64.17 FEET;
3. THENCE NORTH 86°56'11" EAST, 142.59 FEET;
4. THENCE SOUTH 89°00'26" EAST, 59.27 FEET;
5. THENCE TO THE RIGHT ALONG THE ARC OF A TANGENT CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 505.00 FEET, A CENTRAL ANGLE OF 07°14'57", AND AN ARC LENGTH OF 63.89 FEET;
6. THENCE SOUTH 81°45'28" EAST, 86.92 FEET;
7. THENCE TO THE LEFT ALONG THE ARC OF A TANGENT CURVE, CONCAVE TO THE NORTH, HAVING A RADIUS OF 325.00 FEET, A CENTRAL ANGLE OF 13°43'39", AND AN ARC LENGTH OF 77.87 FEET;
8. THENCE NORTH 84°30'53" EAST, 95.86 FEET;
9. THENCE NORTH 87°56'01" EAST, 146.25 FEET TO THE EAST BOUNDARY OF SAID RESULTANT PARCEL 1;

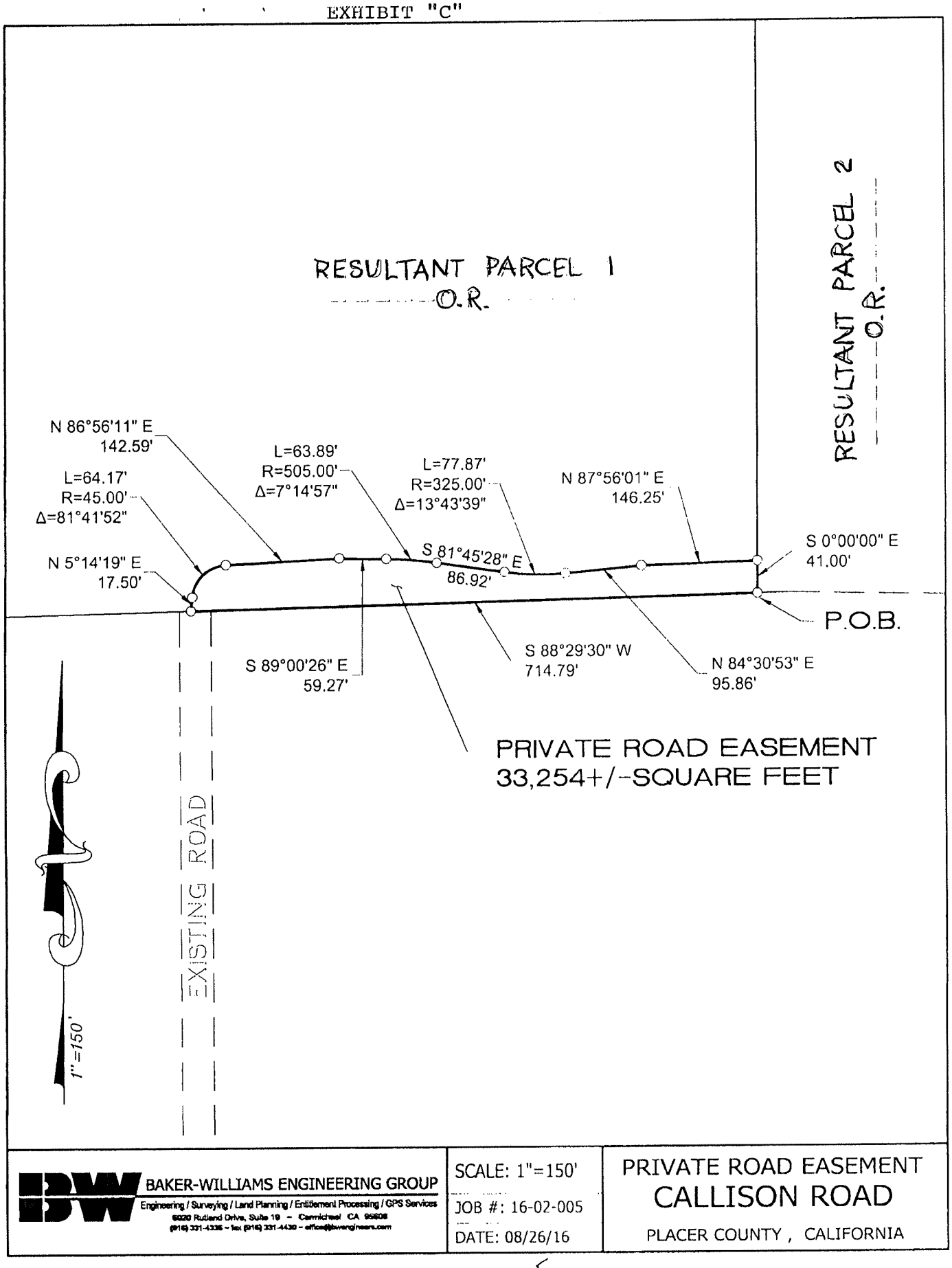
THENCE ALONG SAID EAST BOUNDARY, SOUTH 0°00'00" EAST, 41.00 FEET TO THE **POINT OF BEGINNING.**

THE NORTHERLY AND WESTERLY LINE OF SAID EASEMENT, AS DESCRIBED ABOVE IN COURSES 1 -9 INCLUSIVE, SHALL BE 5.00 FEET NORTHERLY AND WESTERLY OF THE EXISTING AND CURRENT EDGE OF ROADWAY WITHIN SAID EASEMENT DESCRIBED ABOVE.

SAID EASEMENT IS FOR THE BENEFIT OF RESULTANT PARCEL 2 OF SAID DOCUMENT.

CONTAINING 33,254 SQUARE FEET, MORE OR LESS.

EXHIBIT "C"



BAKER-WILLIAMS ENGINEERING GROUP Engineering / Surveying / Land Planning / Entitlement Processing / GPS Services 6020 Rutland Drive, Suite 19 - Carmichael CA 95608 (916) 331-4336 - fax (916) 331-4439 - office@bwengineers.com	SCALE: 1"=150' JOB #: 16-02-005 DATE: 08/26/16	PRIVATE ROAD EASEMENT CALLISON ROAD PLACER COUNTY , CALIFORNIA

5

APPENDIX Q

BEM MAINTENANCE

TECHNICAL MEMORANDUM

Date: May 19, 2022

To: Placer County Environmental Health
3091 County Center Drive; Suite 180
Auburn, CA 95603

Subject: Project 8 (PLN21-00198) – Anticipated On-Site Sewage Flows

As shown in REV-B of the septic feasibility report (appended hereto as Attachment C), dated March 21st, 2022, and generated by Lindbloom Septic Design, Inc., two areas, or zones, within the project boundary have been deemed suitable for on-site septic disposal. These zones, identified as "West" and "East", have the capability of disposing of 4,134 gallons per day (gal/day) and 4,421 gal/day of effluent flow respectively. The "West" zone is located below the Antelope Canal and at a lower elevation than that of the wine cave floor and the lower warehouse/processing building. The "East" zone is located downslope of the top of the property and at an elevation beneath that of the tasting room building and upper processing area.

This information presents two options for the eventual design of the Project 8 septic system. The first option would be a design consisting of a system resulting in ≤ 2,500 gal/day of sewage flow with a single primary leach field in the "West" zone. The "East" zone would be designated for repair and would remain undisturbed until such time the primary system became compromised, and the repair area needed to be utilized in its place.

The second option would be a design consisting of two smaller systems. In this case there would be primary and repair leach areas designated in both the "West" and "East" zones. Each system would be designed to maximize effluent flow to the primary area while maintaining adequate area for repair and adequate separation between the primary and repair areas. The areas designated for repair in this case would also remain undisturbed until such time the primary system became compromised, and the repair areas became necessary for use.

Anticipated sewage flows are shown in Attachment A.

As shown in Attachment A, the total anticipated sewage flow for Project 8 is 3,525 gal/day. On this basis, the second of the aforementioned design options is proposed for meeting the Project 8 sewage flow demand. This will result in the design and installation of two on-site septic systems in the zones designated within the septic feasibility report. Each system will be designed to accommodate approximately 1,800-2,000 gal/day of sewage flow. This represents less than half of their respective maximum disposal capacities thus allowing for designated repair areas in each zone with additional margin.

Additional measures can also be taken during the detailed design phase of the on-site system(s) to further ensure adequate sewage disposal capacity is provided such as pre-treatment of effluent flows, temporary on-site storage, incorporation of a grease interceptor placed in-line with sewage generated by food preparation, and installation of automatically controlled and ultra-low flow plumbing fixtures.

Ultimately, the detailed design of the on-site septic system(s) to be installed for Project 8 will be carried out by qualified individuals during the construction document phase of the project. The final proposed design will, of course, then be evaluated by County staff as part of the permit review process. We and our consultants have a very high level of confidence moving forward that the anticipated effluent sewage flows generated by the project will be suitably accommodated by the system(s) that will result from that process.

Sincerely,



Evan Mackenzie
Engineering Manager
Building Engineering & Maintenance, Inc.

ATTACHMENT A: Anticipated Sewage Flows

Anticipated On-Site Sewage Flows

Source of Flow	Design Flow[1] Gallons per Day (gpd)	Qty	Subtotal
Accessory Restaurant	50 (per seat)	32	1600
Wine Tasting	5 (per person)	50	250
Event Hosting	5 (per person)[2]	200[3]	1000
Employees	15 (per person)	15	225
Caretaker's Residence	150 (per bedroom)	3	450
Total Anticipated Sewage Flow (Gallons per Day):			**3525**

1. Design flows per Placer County LAMP On-Site Sewage Manual and Placer County Code Section 17.56.330 (Wineries & Farm Breweries)
2. 5 gpd/person used per direction from Laura Rath in email dated 5/10/2022 (see Attachment B)
3. Maximum Special Event attendees used as worst-case scenario as Special Events and Ag-Promo events will not occur on the same day

ATTACHMENT B: Email Correspondence (L. Rath)

Evan Mackenzie

From: Laura Rath <LRath@placer.ca.gov>
Sent: Tuesday, May 10, 2022 3:31 PM
To: Evan Mackenzie
Subject: RE: Penryn Winery CUP (PLN21-00198), Comments on 3rd Submittal

Hi Evan,

Thank you for taking the time to discuss the proposed sewage flows for the Penryn 8 Winery. Outlined below are the gallon per day (gpd) requirements for each of your proposed uses:

50 gpd/ restaurant seat
5 gpd/ wine taster
5 gpd/ event attendee (ag event and special event)
15 gpd/ employee
150 gpd/ bedroom for residential dwelling

If you can provide flow calculations for each of the uses for your project this would satisfy Item #2 on our memo form April 12, 2022. Feel free to email the calculations to me and I will include them in our file.

I will review the slope stability report and finalize our review of the sewage disposal areas.

Let me know if you have any questions.

Thanks,
Laura

Laura Rath, Senior REHS
Placer County | Health & Human Services | Environmental Health
Direct Line (530) 745-2355 | Main Line (530) 745-2300 | FAX (530) 745-2370
Lrath@placer.ca.gov| http://www.placer.ca.gov/departments/environmental-health
3091 County Center Drive, Suite 180 Auburn, CA 95603

From: Evan Mackenzie <evanm@bem.com>
Sent: Tuesday, May 10, 2022 2:28 PM
To: Laura Rath <LRath@placer.ca.gov>
Subject: [EXTERNAL] FW: Penryn Winery CUP (PLN21-00198), Comments on 3rd Submittal

From: Shirlee Herrington <SHerring@placer.ca.gov>
Sent: Friday, April 22, 2022 1:04 PM
To: Evan Mackenzie <evanm@bem.com>

ATTACHMENT C: Septic Feasibility Report

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LINDBLOOM

Septic Design, Inc.
122 East Street
Auburn, CA 95603

Date: March 21, 2022

Assessor's Parcel Number: 031-220-061, 032-124-080

Owner/Applicant: Building Engineering & Maintenance, Inc.

Property Location: Callison Road, Penryn

Proposed Use: Winery

Size of Property: 42± Acres

Water Supply: Public Well

Recommendations:

My previous feasibility report recommended limiting the proposed sewage flows for this project to 2500 gallons or less per day to avoid the additional requirements for a "large system". To this end, we identified an area in the northwest corner of the property that would serve as the Primary Area and we identified an area in the northeast portion of the property that would serve as the 100% Repair Area (see attached plot plans).

The property owners would now like to explore the possibility of increasing the proposed sewage flows above this threshold. So this report will address the maximum sewage flows possible, based on the soil mantle testing and percolation testing performed to date.

The **Primary Area** is suitable for a pressure distribution system. The leachtrenches will be 18" deep x 36" wide.

Calculations for West Area (Primary Area):

Average percolation rate (P-1,2,3,4):	52	mpi
Application rate for 52 mpi: $(5 \div \sqrt{52})$	0.69	gal/sq ft/day
Total lineal footage of leachtrench available in this area:	2350±	lin ft

Total square footage of leachtrench available in this area: (2350 lin ft x 3 sq ft/lin ft)	7050	sq ft
Maximum gallons per day this area can dispose of: (7050 sq ft x 0.69 gal/sq ft/day)	4864	gal/day
Recommended gallons per day this area can dispose of*: [4864 gal/day x 0.85 (correction factor)]	4134	gal/day

*Built into the calculation for pressure distribution leachtrenches in Placer County is a 30% reduction in leachtrench required as compared to standard leachtrenches. In my opinion, such a significant reduction is not advisable. I believe a 15% reduction is more prudent, which is reflected in the recommended sewages flows above.

The eastern boundary of this leachfield area will be the setback to the cut bank above the proposed parking lot. On the attached plot plan I have shown the setback from the existing cut bank. This is subject to change. If the cut bank is extended farther into the hillside the setback will increase, reducing the amount of leachfield available. Conversely, if a retaining wall is constructed at the base of the existing cut bank and the cut slope above the retaining wall is backfilled and restored to its natural slope, the setback will be reduced and a little more leachfield will be available. The required setback from a cut bank to an upslope leachfield is four times the height of the cut.

The **100% Repair Area** is suitable for a deep trench pressure distribution system. The leachtrenches will be 31" deep x 24" wide. The downslope portion of this area (in the vicinity of soil mantles D & E) will require a pretreatment system.

This area requires a "slope stability study" since the slope in this area exceeds 30%. This study will be performed by others in the near future.

A parking area is proposed just upslope from this proposed 100% Repair Area. The Repair Area must be protected from all grading activities. Care must be taken when installing the parking area to avoid placing fill over the Repair Area.

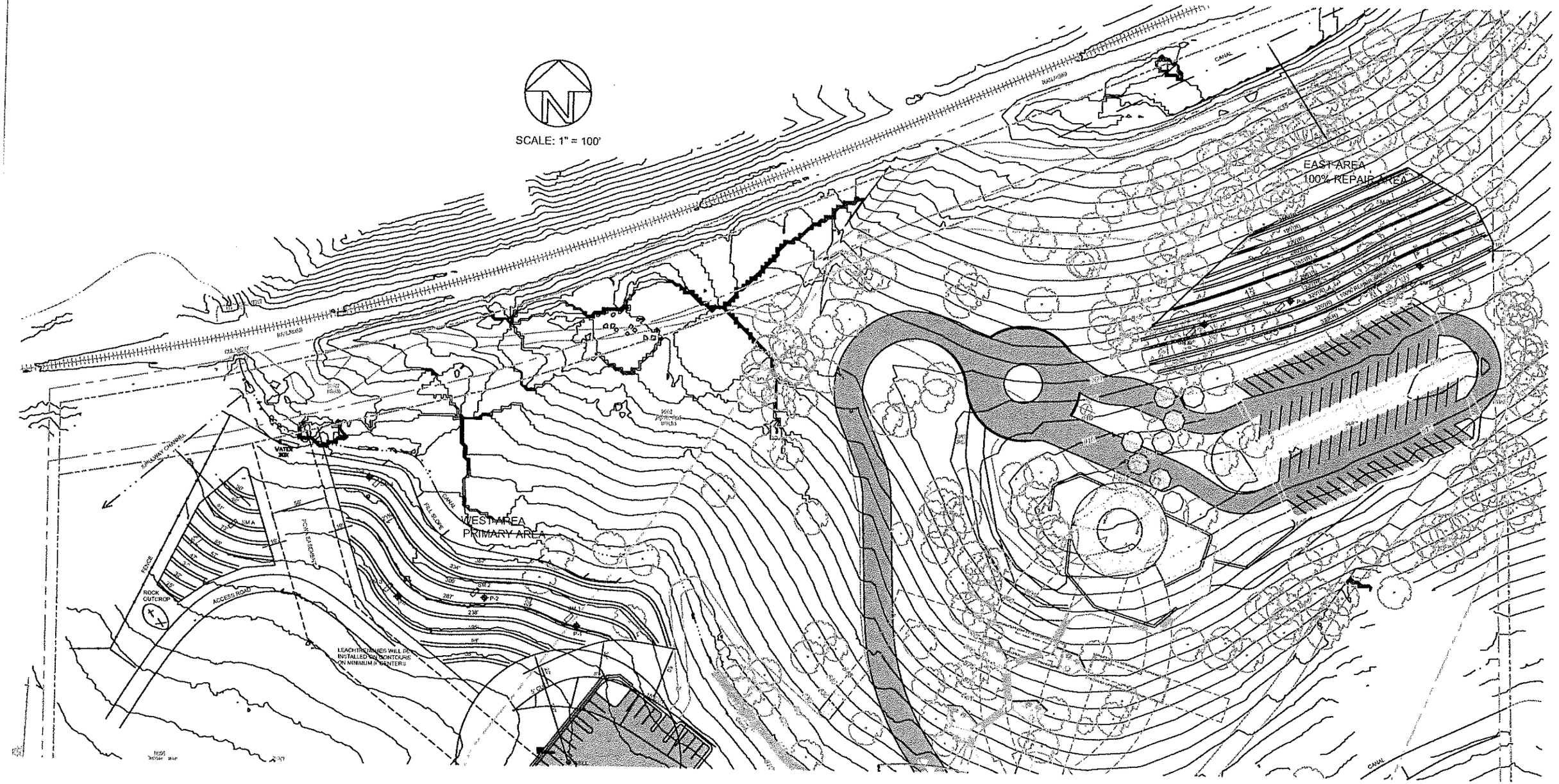
Calculations for East Area (100% Repair Area)

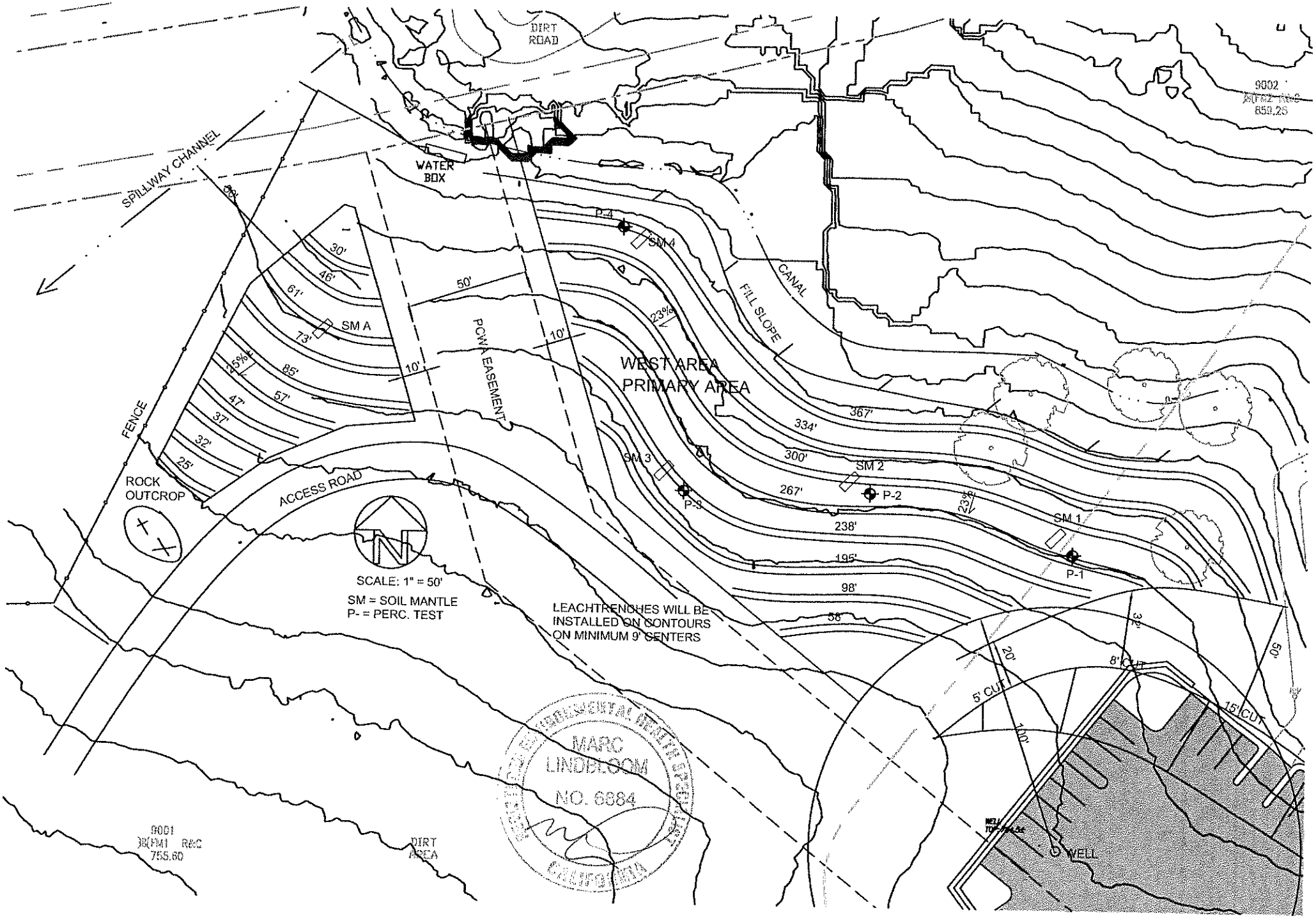
Average percolation rate (P-A,B,C):	37	mpi
Application rate for 37 mpi: $(5 \div \sqrt{37})$	0.82	gal/sq ft/day
Total lineal footage of leachtrench available in this area:	2696	lin ft

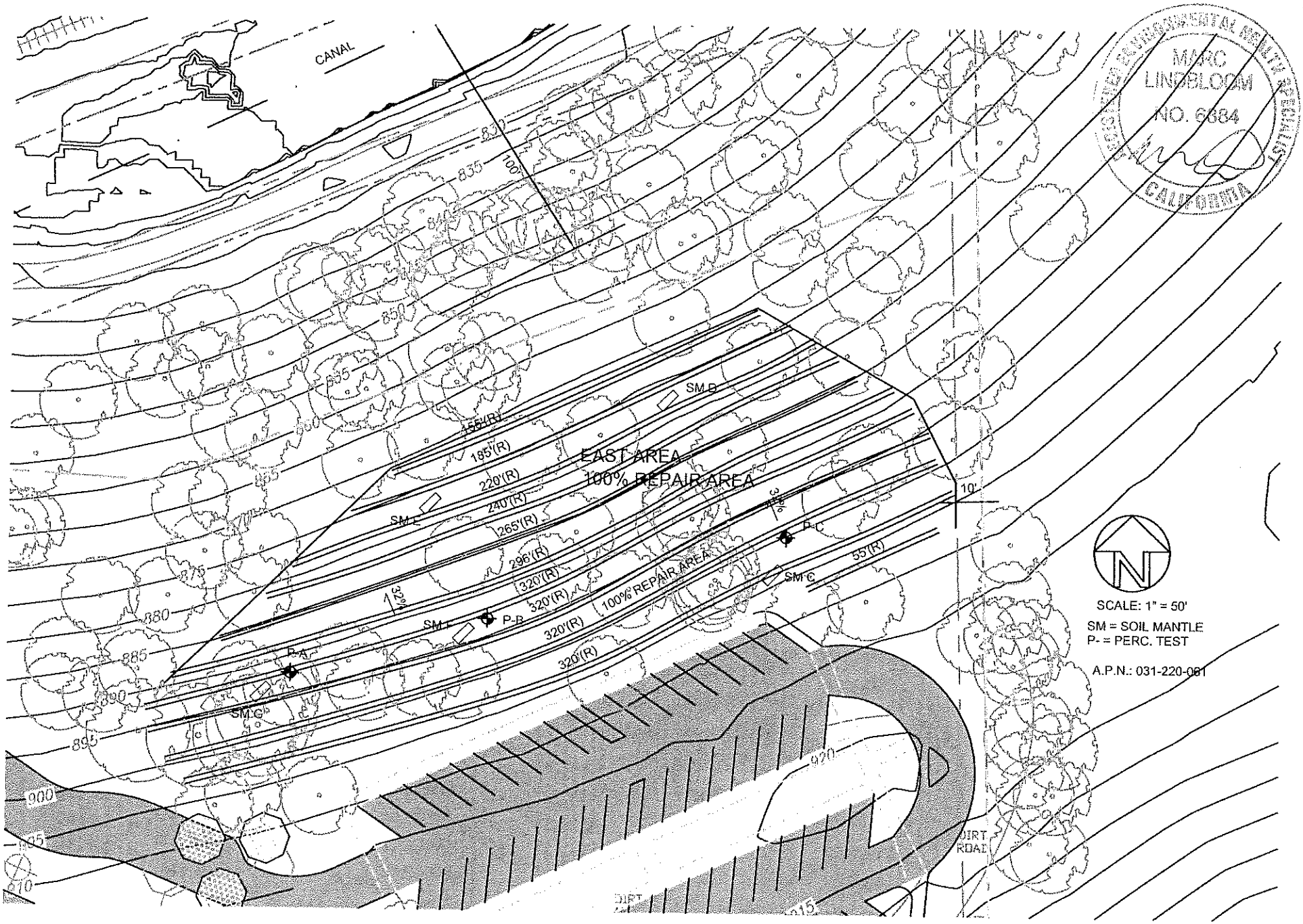
Total square footage of leachtrench available in this area: (2696 lin ft x 2 sq ft/lin ft)	5392	sq ft
Gallons per day this area can dispose of: (5392 sq ft x 0.82 gal/sq ft/day)	4421	gal/day

This report has presumed that all sewage flows would be disposed of in a single leachfield, the Primary Area. Another option would be to divide both the West Area and the East Area into both a Primary Area and a 100% Repair Area. In this case the proposed sewage flows could stay below the 2500 gpd threshold for each area. Essentially, the sewage flows from this project would be divided into two smaller septic systems. However, to accomplish this there would need to be a reasonable way of dividing the sewage flows into two, roughly equal flows. The feasibility of this approach can be assessed by the septic designer when the various sources of sewage flow are finalized for this project.

Marc Lindbloom, R.E.H.S. #6884
(530) 888-7464


N
SCALE: 1" = 100'
EAST AREA
100% REPAIR AREA
WEST AREA
PRIMARY AREA
CANAL
DRAINAGE CHANNEL
VATES
HMA
FENCE
ROCK
OUTCROP
ACCESS ROAD
P-1
P-2
LEACHFIELD LINES WILL BE
INSTALLED ON CONTOURS
ON MINIMUM 8' CENTERS


DIRT ROAD
SPILLWAY CHANNEL
WATER BOX
P-4
SM 4
CANAL
FILL SLOPE
23%
30'
46'
61'
73'
85'
57'
47'
37'
32'
25'
SM A
50'
10'
PCWA EASEMENT
10'
WEST AREA
PRIMARY AREA
367'
334'
300'
267'
238'
195'
98'
58'
SM 3
SM 2
P-3
P-2
SM 1
P-1
FENCE
ROCK OUTCROP
ACCESS ROAD
SCALE: 1" = 50'
SM = SOIL MANTLE
P- = PERC. TEST
LEACHTRENCHES WILL BE INSTALLED ON CONTOURS ON MINIMUM 9' CENTERS
20'
5' CUT
8' CUT
15' CUT
100'
WELL
DIRT AREA
MARC LINDBLOOM
NO. 6684
ENVIRONMENTAL HEALTH SPECIALIST
CALIFORNIA


CANAL
EAST AREA
100% REPAIR AREA
SM B
SM E
SM F
SM G
SM C
P-A
P-B
P-C
155'(R)
185'(R)
220'(R)
240'(R)
265'(R)
296'(R)
320'(R)
320'(R)
320'(R)
320'(R)
55'(R)
100% REPAIR AREA
3%
3%
10'
DIRT ROAD
DIRT
SCALE: 1" = 50'
SM = SOIL MANTLE
P- = PERC. TEST
A.P.N.: 031-220-081
MARC LINDBLOOM
NO. 6634
CALIFORNIA

APPENDIX R

TRANSPORTATION IMPACT ANALYSIS

FOR

PROJECT 8 WINERY

Placer County, California

Prepared For:

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October 28, 2022

Job No. 5765-25

TRANSPORTATION IMPACT ANALYSIS FOR PROJECT 8 WINERY

Placer County, California

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October 28, 2022

KDA

TRANSPORTATION IMPACT ANALYSIS FOR
PROJECT 8 WINERY
Placer County, CA

INTRODUCTION

This report documents KD Anderson & Associates' analysis of the transportation impacts associated with developing the **Project 8 Winery** project. Seventy-nine percent of the project footprint (including 100% of the occupied structures) is within the Newcastle / Ophir Community Plan (NOCP) area and 21% is in the Horseshoe Bar / Penryn Community Plan (HBPCP)area.

Scope of Analysis

This Transportation Impact Analysis considers two separate topics.

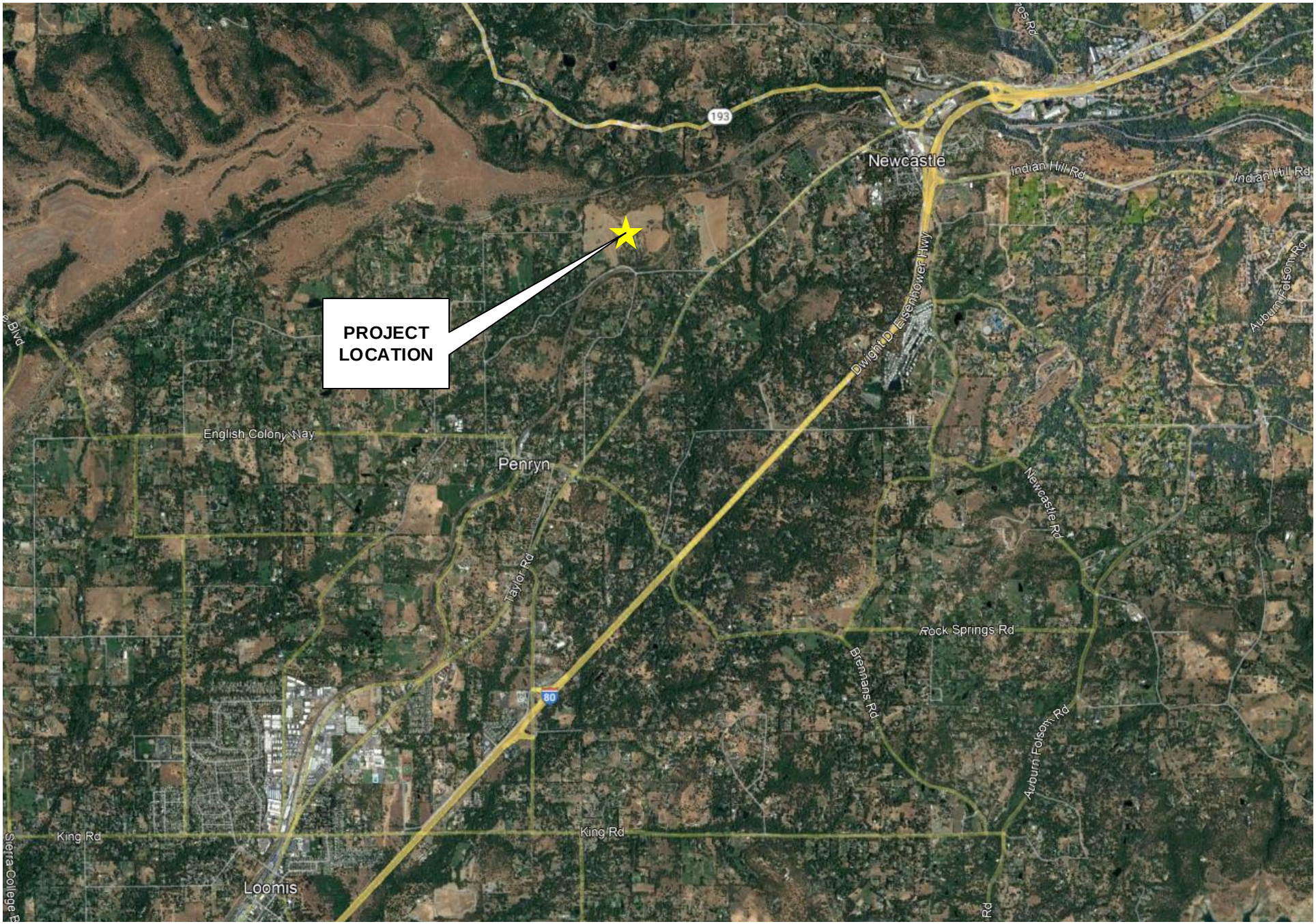
The project's impacts under CEQA have been evaluated based on its effect on total regional **Vehicles Miles Traveled (VMT**) as required under SB 743. The VMT analysis makes use of the Transportation Study Guidelines adopted by Placer County to determine consistency with Placer County goals for reduction in VMT. The CEQA impact analysis also considered the project's impacts to alternative transportation modes and safety.

A **Local Transportation Analysis (LTA)** intended to describe the traffic operational effects of the project was also prepared to identify any circulation / roadway improvements needed to reduce project effects to a level of insignificance. This report is a separate document.

Project Description

The Project 8 Winery is located north of the unincorporated Placer County community of Penryn as shown in Figure 1. The project proposes construction of a full production winery, generally including wine production facilities, a tasting room, an underground wine cave, an accessory restaurant, and associated facilities on approximately 17.96 acres of a 44.14-acre parcel area located on Callison Road off of Taylor Road, as illustrated in Figure 2.

The project would be accompanied by frontage improvements to Callison Road including reconstruction of roughly 700 linear feet of Callison Road in the area north of the existing UPRR crossing. These improvements would provide two 12-foot wide travel lanes and access improvements that are consistent with the intent of Placer County standard Plate 116.

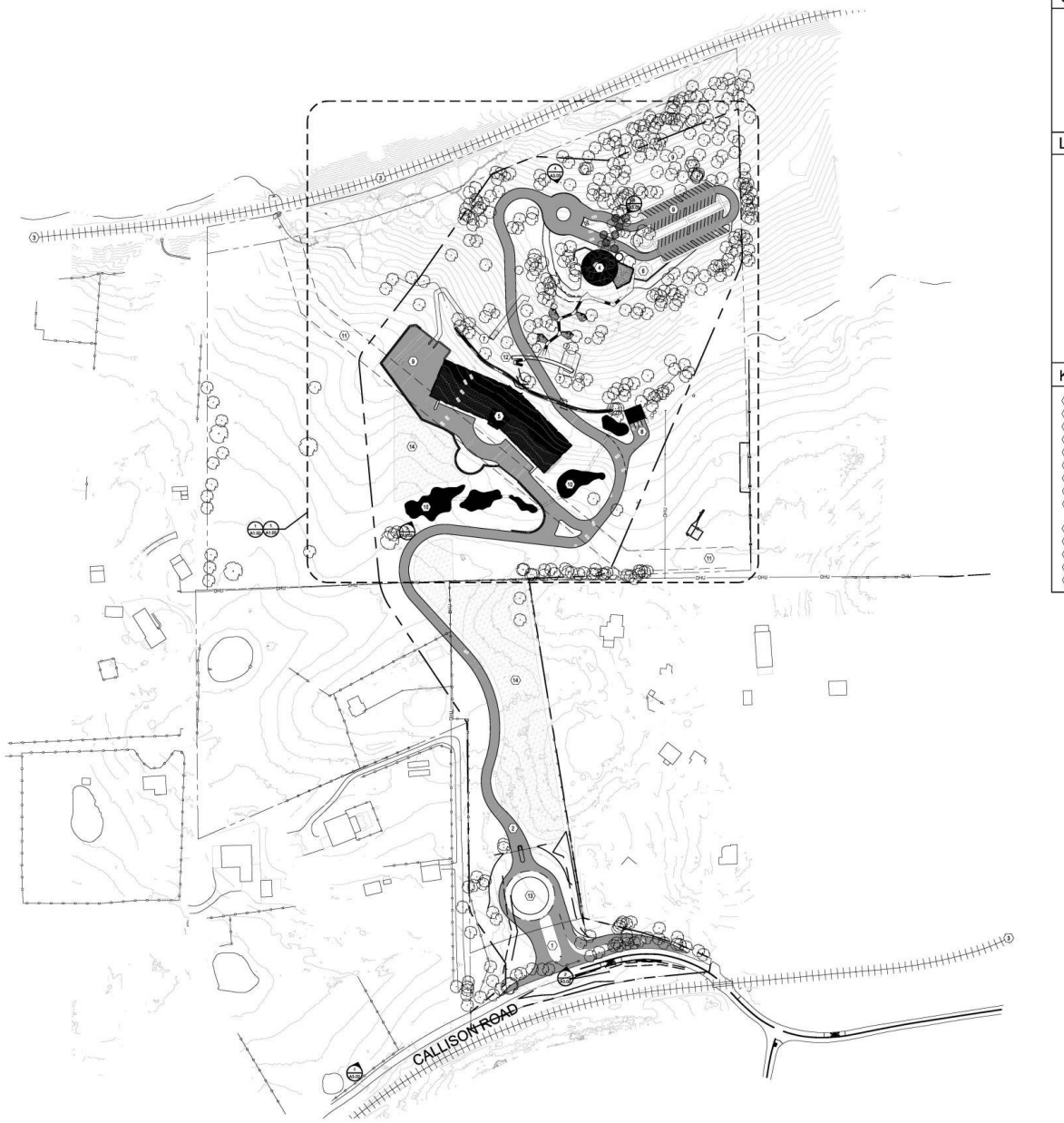


VICINITY MAP

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Transportation Engineers

5765-25 RA 9/8/2022

figure 1



1 OVERALL SITE PLAN
1" = 100'-0"

GENERAL NOTES:

1. FOR TAX LOT AND PROPERTY INFORMATION REFER TO G0.01.
2. SITE PLANS ARE PRELIMINARY SCHEMATICS, TO AID IN UNDERSTANDING THE PROPOSED DEVELOPMENT SCOPE.
3. SITE GRADING AND TOPOGRAPHIC SURVEY INFORMATION SHOWN IS EXISTING. SITE WORK TO CORRELATE TO PROPOSED DEVELOPMENT AS DESIGN WORK PROCEEDS.

LEGEND - SITE PLAN:

- PROPERTY LINE
- PARCEL BOUNDARY
- OVERHEAD UTILITY
- FENCE
- EXISTING TREE

KEYNOTES - SITE PLAN:

1. SITE ENTRANCE
2. EXISTING PRIVATE DRIVE
3. EXISTING RAILROAD TRACK
4. PROPOSED UPPER BUILDING
5. PROPOSED LOWER BUILDING
6. (N) WATER TANK (UNDERGROUND)
7. (N) WINE CAVE ACCESS POINT
8. (N) SUPPORT BUILDING
9. (N) PARKING, PROJECT TO INCLUDE RETAINING WALLS AND RE-GRADING AS REQUIRED IN THESE AREAS. PARKING WILL COMPLY WITH PLACER COUNTY LANDSCAPING STANDARDS.
10. (N) WATER TREATMENT PONDS
11. EASEMENT
12. (N) PEDESTRIAN BRIDGE
13. (N) GUARD HOUSE
14. (N) VINEYARD

S|E A
SCOTT | EDWARDS ARCHITECTURE LLP
2525 E. Burnside St., Portland, OR 97214
phone:(503) 226-3617 www.sealip.com

PRELIMINARY
NOT FOR
CONSTRUCTION

PROJECT 8
7615 CALLISON RD
PENRYN, CA 95663

BEM

Drawing:

OVERALL SITE PLAN

Job No:	20076
Date:	8.24.2020
Drawn By:	-
Checked By:	-
Sheet No:	

A1.01

SITE PLAN

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5765-25 RA 9/8/2022

figure 2

EXISTING SETTING

Roadways / Intersections

Existing roadways serving this portion of Placer County are discussed below and located in Figure 3. Regional access to the study area is served by four state highways that traverse Placer County, one Placer County arterial and several collector roads.

Interstate 80 (I-80) is the primary east-west arterial across Placer County and Northern California. In the vicinity of the proposed project, I-80 is a six-lane controlled access freeway. Access for the proposed project to the interstate is available via interchanges on Penryn Road, on Newcastle Road and at SR 193 / Ophir Road near the City of Auburn.

The California Department of Transportation (Caltrans) provides annual reports of the volume of traffic on the state highway system. Recent counts available from Caltrans report an *Annual Average Daily Traffic (AADT - 2020)* volume of 92,000 vehicles per day (vpd) west of Penryn Road, 84,000 AADT west of Newcastle Road, 82,000 east of Newcastle Road and 83,000 AADT east of the Ophir Road interchange. (source: http://www.dot.ca.gov/trafficops/census/volumes2020/)

State Route 193 (SR 193) is an east-west route that connects the City of Lincoln with I-80 across the study area. SR 193 originates in Lincoln as McBean Park Drive and becomes SR 193 roughly 1.4 miles west of the Sierra College Blvd intersection and continues from that point to I-80. In the area of the proposed project SR 193 is a two-lane conventional highway. Caltrans data indicated that in 2020 SR 193 carries 10,700 AADT west of Sierra College Blvd and 7,800 AADT from Sierra College Blvd to Fowler Lane. The volumes drop to 5,000 AADT from that point to Taylor Road. Trucks comprise 9% of the daily traffic on SR 193 east of Sierra College Blvd.

Taylor Road is a major road that runs parallel to Interstate 80 and links the project site with Penryn, Loomis and the City of Rocklin to the west and with the communities of Newcastle, Ophir and the City of Auburn to the east. The Placer County General Plan designates Taylor Road as a Rural Arterial in the area east of the Town of Loomis limits. The HBPCP identifies Taylor Road as an Arterial.

Taylor Road is generally a two-lane road. In the area of this project Taylor Road has one travel lane in each direction, and separate turn lanes exist at most major intersections. On-street parking is prohibited in the general area of the project in Placer County. The posted speed limit on Taylor Road is 50 mph in the area of the project east of the Town of Loomis limits and drops to 35 mph through Newcastle. Weekday daily traffic counts conducted in 2022 for this analysis indicated that Taylor Road carried 5,324 vpd in the area from English Colony Way to Callison Road and 4,655 from Callison Road to Newcastle.

Taylor Road links the project area to other streets of regional importance via the intersections addressed in the analysis.

Penryn Road is a north south road that links Taylor Road with Interstate 80 and King Road to the south. Penryn Road is designated a Rural Collector in the Placer County General Plan Circulation Element (Table 1-7). The segment from King Road to Taylor Road is an Arterial in the HBPCP, while the segment from Taylor Road to English Colony Way is a Collector. Penryn Road is a two-lane road with separate left turn lanes or Two-Way Left-Turn (TWLT) lane at key intersections.

English Colony Way is a two lane east-west roadway that links Sierra College Blvd with Taylor Road. The General Plan identifies English Colony Way as a Rural Collector, and the HBPCP identified the road as an Arterial.

Rock Springs Road extends southeasterly from the Taylor Road / English Colony Way intersection to Auburn Folsom Road. This two-lane road is designated a Rural Collector in the General Plan and a Collector in the HBPCP.

Callison Road is a local rural road that provides access to the rural area north of Penryn. Callison Road extends west from an intersection on Taylor Road for about 1.33 miles to Clark Tunnel Road. Callison Road crosses the UPRR at a gated crossing about 2,300 feet west of Taylor Road, and the proposed project's access is on a section of Callison Road just west of that crossing that is within the railroad right of way. Callison Road is a two lane rural road with varying pavement width and no shoulders. The pavement width ranges from 22 to 24 feet in the area from the UPRR to Taylor Road, and from the crossing to Clark Tunnel Road the width ranges from 16 feet to 20 feet. There is no posted speed limit on Callison Road, and the California Vehicle Code's prima facie rural 55 speed limit would be applicable. Curve ahead warning signs suggest an advisory speed of 20 mph through the UPRR crossing and 15 mph through a reversing curve between the project and Clark Tunnel Road. A daily traffic count conducted for this analysis indicated that Callison Road carried 245 vpd from Clark Tunnel Road to the UPRR and 576 vpd from the railroad crossing to Taylor Road.

Clark Tunnel Road is a local rural road that extends north from English Colony way for about two miles to provide access to the rural community between the UPRR and English Colony Way. Callison Road intersects Clark Tunnel Road about ½ mile north of English Colony Way. Clark Tunnel Road is a two-lane rural road with varying pavement width and no shoulders. The pavement width ranges from 20 to 22 feet in the area from English Colony Way to Callison Road. A 30 mph speed limit is posted on Clark Tunnel Road north of English Colony Way. A daily traffic count conducted for this analysis indicated that Clark Tunnel Road carried 675 vpd north of English Colony Way.

Sisley Road is a local rural road that extends north from Taylor Road near the English Colony Way intersection for about 1.1 miles to Callison Road near the UPRR crossing. Sisley Road is a two-lane road with pavement in poor condition with width that ranges from 16 to 22 feet with no shoulders. The rural prima facie speed limit applies, and a 25 mph advisory speed is signed on a curve roughly midway along the road. A school bus stop is also signed. A daily traffic count conducted for this analysis indicated that Sisley Road carried 193 vpd north of Taylor Road.

The LTA considers the operation of eleven existing intersections on routes to and from the project, including seven locations on state highways.

The **Ophir Road / Taylor Road (SR 193) / I-80 WB ramps intersection (Location 1 in Figure 3)** is controlled by All-Way Stop signs. Each approach has a single travel lane, with the exception of the eastbound Taylor Road approach where a separate "free" right turn lane is not controlled by the stop sign. No crosswalks are marked at this intersection.

The **Hillview Dr / SR 193 / I-80 EB ramps intersection (2)** is controlled by stop signs on the I-80 off-ramp and on the Hillsdale Road approach. Each approach has a single travel lane, with the exception of the I-80 off-ramp where a separate "free" right turn lane is not controlled by the stop sign. No crosswalks are marked at this intersection.

In Newcastle, the **Old State Highway / Newcastle Road / I-80 WB ramps intersection (3)** is controlled by a stop sign on the I-80 off-ramp. Each approach has a single travel lane, and crosswalks are marked on the north and west legs of this intersection.

On the other side of Interstate 80 the **Newcastle Road / Indian Hill Road / I-80 EB ramps intersection (4)** is controlled by a traffic signal. On Newcastle Road the northbound approach is configured as separate left turn, through and right turn lanes, and the southbound approach has a left turn lane and a combined through and right turn lane. The left turn lanes on Newcastle Road operate with "protected" phasing. The I-80 EB off-ramp and Indian Hill Road approaches are operated as "split" phases. The two-lane off-ramp is marked as a combined left turn and through and a combined thru and right turn lane. The Indian Hill Road approach has a combined thru and left turn lane and a separate right turn lane. Crosswalks are marked on the intersections south and west legs.

The **SR 193 (Old State Highway) / Taylor Road intersection (5)** is controlled by an All-Way Stop. Each approach has a single travel lane, with the exception of the westbound Taylor Road approach where a left turn lane is provided. No crosswalks are marked at this intersection.

The **Taylor Road / Callison Road intersection (6)** is a "tee' controlled by a stop sign on the Callison Road approach. The Callison Road approach travels through a 60 foot radius curve immediately north of Taylor Road. Each approach has a single travel lane, and no crosswalks are marked at this intersection.

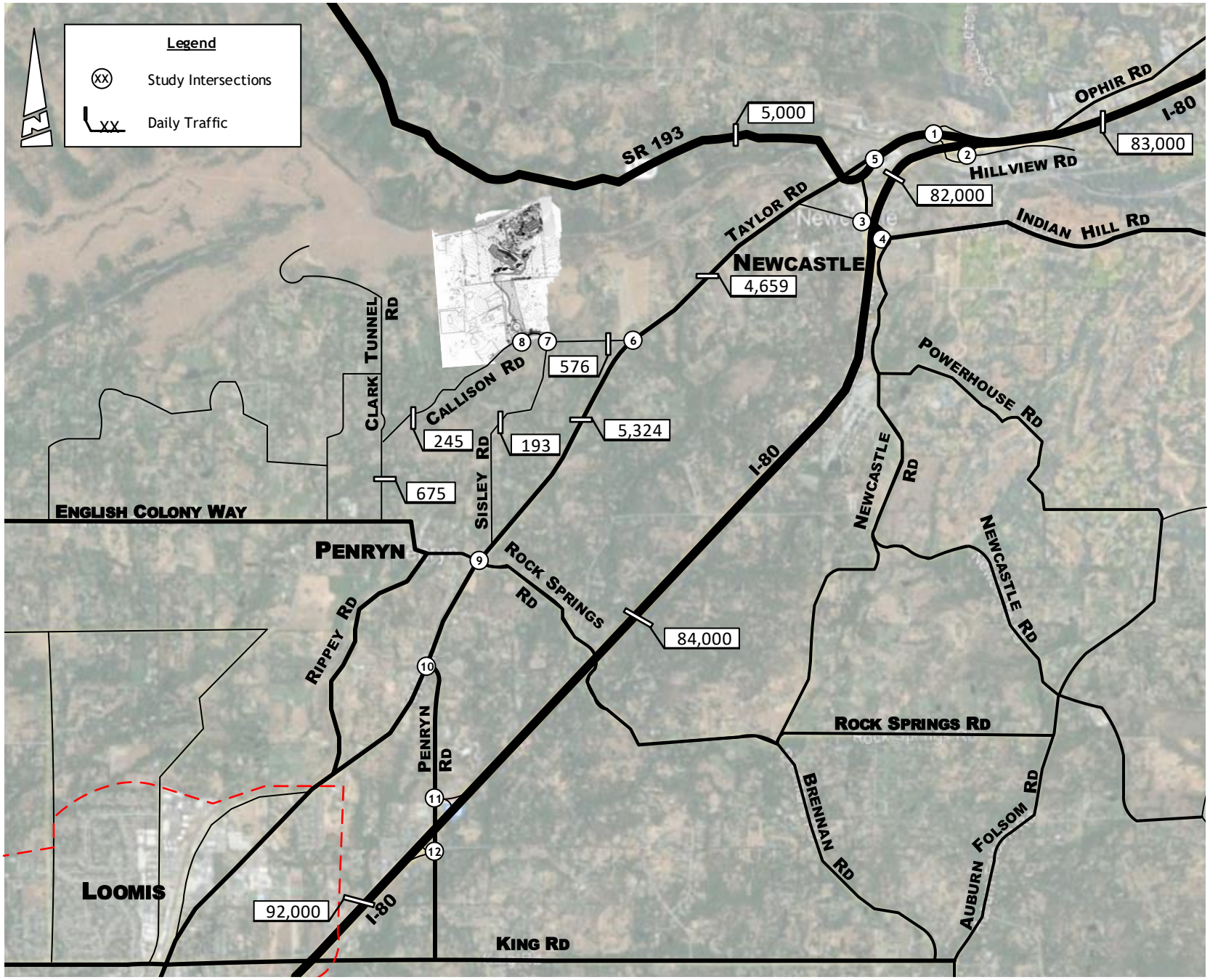
The **Callison Road / Sisley Road intersection (7)** is located 180 feet from the UPRR crossing. It is a "tee" controlled by a stop sign on the Sisley Road approach. Each approach has a single travel lane, and no crosswalks are marked at this intersection.

The **Taylor Road / English Colony Way / Rock Springs Road intersection (9)** is controlled by an All-Way Stop. Taylor Road has separate left turn lanes at this location and a separated westbound right turn lanes is also provided. The Rock Springs Road approach has a single lane. The two-lane English Colony way approach has a separated right turn lane outside of the stop sign. The intersection also has an overhead flashing beacon. No crosswalks are marked at this intersection.

The **Taylor Road / Penryn Road intersection (10)** was recently signalized. Taylor Road has separate left turn lanes with protected phasing. The two lane Penryn Road approach has a separate right turn lane. There are no crosswalks marked at this intersection.

The **Penryn Road / I-80 Westbound ramps / Boyington Road intersection (11)** is controlled by a traffic signal. The Penryn Road approaches have separate left turn lanes that operate with protected signal phases. The Boyington Road and I-80 ramp approaches have single lanes, and these legs operate with "split" phases. Crosswalks are striped across the north, east and west legs of the intersection.

The **Penryn Road / I-80 Eastbound ramps / Boulder Creek Lane intersection (12)** is controlled by stop signs on the off-ramp and Boulder Creek Lane approaches. Separate left turn lanes are provided on the Penryn Road approaches. The off-ramp and Boulder Creek Lane approach have single lanes, but the off-ramp approach has an 8-foot shoulder and corner radius that allows right turns to proceed around the queue of traffic waiting to turn left.



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Transportation Engineers

REGIONAL STUDY LOCATIONS AND CURRENT AVERAGE DAILY TRAFFIC VOLUMES

5765-25 RA 9/8/2022

figure 3

Future Planned Improvements / Funding Sources

Placer County Traffic Impact Fee Program and CIP. In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, requiring new development within the County to mitigate impacts to the roadway system by paying traffic impact fees. The fees collected through this program, in addition to other funding sources, make it possible for the County to construct roads and other transportation facilities and improvements needed to accommodate new development. The fee was updated by Placer County in August 2021. The County's fee program and Capital Improvement Program is divided into eleven districts, and the Project 8 Winery is included in two of these districts. Seventy-nine percent of the project footprint (including 100% of the occupied structures) is within the Placer Central Benefit District and 21% is located in the Newcastle / Horseshoe Bar / Penryn Benefit District. The Placer County Department of Public Works has determined the applicable fee district is based on the location of construction and that the Placer General Plan fees shall apply to this project. Current study area improvements included in the fee program are noted in Table 1.

TABLE 1
PLACER COUNTYWIDE CIP IMPROVEMENTS

Street	Location	Description
Auburn-Bowman Benefit District		
Indian Hill Road	Auburn Folsom Road to Newcastle Road	Widen to 4-lanes
Newcastle / Horseshoe Bar / Penryn Benefit Area		
English Colony Way	At Taylor Road	Signalize
	Sierra College Blvd to Taylor Road	Realign / Widen for Shoulders and Bike Lanes
Newcastle Road	At I-80	Bridge Modifications
	Indian Hill Road to Rattlesnake Road	Shoulder Widening
Penryn Road	I-80 to King Road	Realign / Widen for Shoulders and Bike Lanes
	At Boyington Rd / I-80	Signalize / Intersection Improvements
	At Boulder Creek Road / I-80	Signalize / Intersection Improvements
	At King Road	Signalize / Intersection Improvements
	At Taylor Road	Signalize / Intersection Improvements
	At I-80	Bridge Modifications
Taylor Road	Town of Loomis to Plan boundary	Construct Bike lanes / Shoulders
State Route 193	Taylor Road to Gold Hill Road	Shoulder Widening
Placer Central Benefit District		
Sierra College Blvd	English Colony Way to SR 193	Widen to 4-lanes
State Route 193	Gold Hill Road to Sierra College Blvd	Shoulder Widening
	City of Lincoln to Sierre College Blvd	Widen to 4-lanes

CEQA Impact Assessment Criteria

Per the Placer County CEQA checklist, a project may have a significant transportation impact on the environment if it would:

a. Conflict with a program, plan, ordinance, or policy, (except Level of Service) addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
b. Substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
c. Result in inadequate emergency access or access to nearby uses.
d. Result in Vehicle Miles Traveled (VMT) which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3 subdivision (b).

The CEQA significance criteria noted in Table 2 are applicable to this project.

TABLE 2
CEQA IMPACT SIGNIFICANCE CRITERIA

Analysis	Component	Significance Criteria
VMT	Roadway	The project would result in a VMT-related impact per the applicable threshold of significance in Table 2 of Placer County guidelines and VMT impact analysis results.
Multi-Modal Plan Consistency	Transit Service and Facilities	The project physically disrupts an existing transit service or facility or interferes with implementation of a planned transit service or facility.
		The project results in increased travel time for busses that adversely effects on-time performance.
		The project results in increased transit ridership demands that result in passenger loads that exceed vehicle loading standards.
		The project results in increased potential for safety conflicts involving transit vehicles and other modes of travel.
	Bicycle Facilities	The project physically disrupts an existing bicycle facility or interferes with implementation of a planned bicycle facility.
		The project results in a significant increase in bicyclists on a facility that does not have adequate bicycle facilities, such that conflicts between bicyclists and other travel modes are likely to increase.
	Pedestrian Facilities	The project fails to provide accessible and safe pedestrian connections between buildings and to adjacent streets and transit facilities.
		The project physically disrupts an existing pedestrian facility or interferes with implementation of a planned pedestrian facility.
		The project results in an increased presence of vehicles and/or pedestrians on a facility that does not have adequate pedestrian facilities, such that conflicts between pedestrians and other travel modes are likely to increase.
	General Plan Consistency	The project conflicts or creates inconsistencies with General Plan policies, except an LOS policy.
Hazard & Safety Impact	Roadway Design and Users	The project would create a condition that does not meet current design standards.
		The project would substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections).
		The project introduces incompatible users (e.g., farm equipment) to a roadway or transportation facility not intended for those users.
	State Highway Facilities	The project results in queueing at off-ramps resulting in slow or stopped traffic past the off-ramp gore point.
		Project is determined to negatively affect safety of the State highway facility.

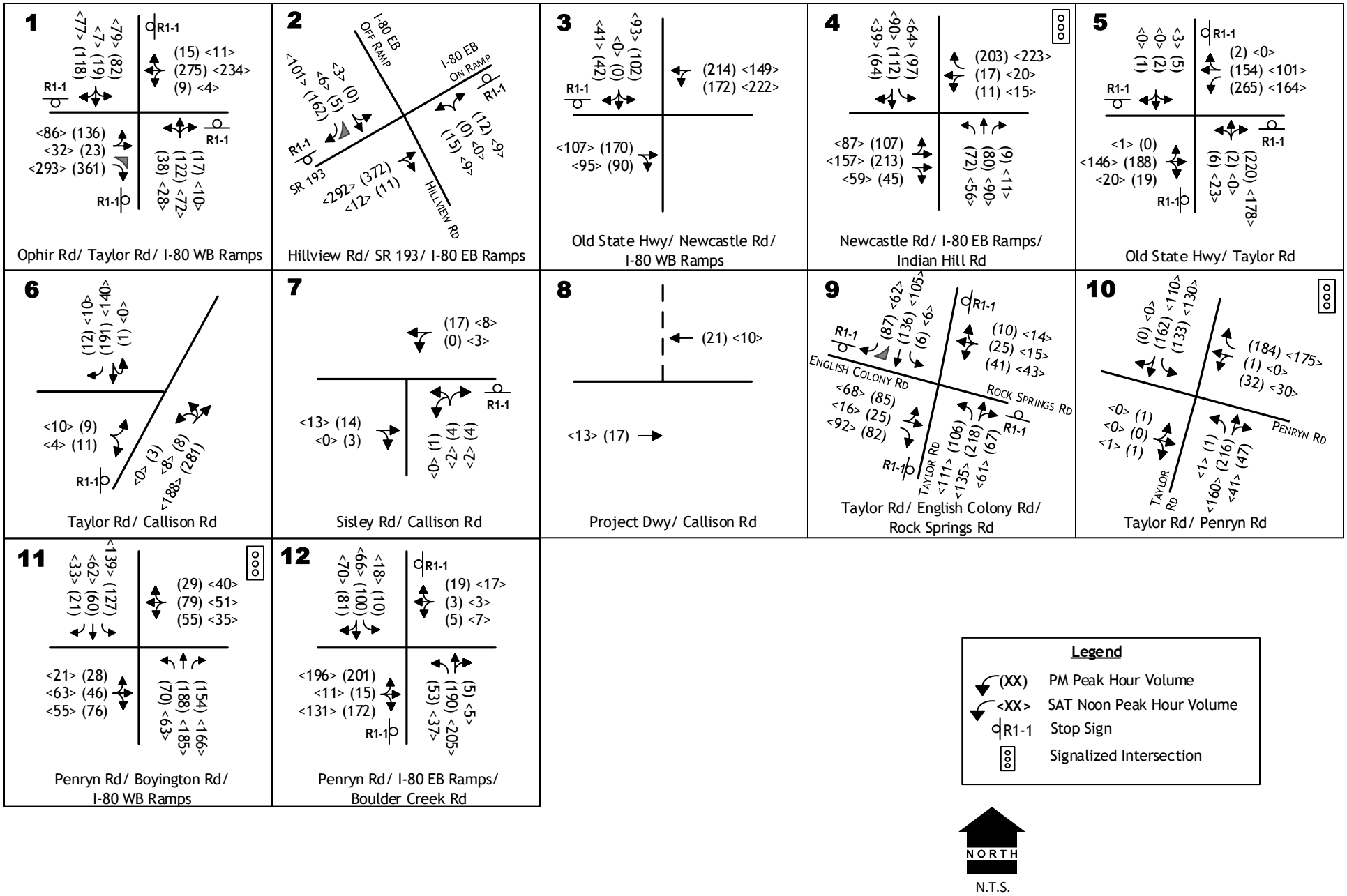
Traffic Volumes

Daily Traffic Volumes. New 24-hr traffic counts were conducted for this analysis on October 14, 2021. Placer County staff reviewed these count results within the context of historic count records for Placer County roads and determined that current traffic volumes in this area had generally returned to pre-COVID 19 levels and that adjustments to account for the effects of COVID-19 were not required. This conclusion is reasonable as Placer County schools have returned to in-person learning and restrictions on employment and shopping no longer exist. These volumes were presented in Figure 3 and are summarized in Table 3.

Peak Hour Traffic Volumes. Peak Hour traffic counts were conducted for this analysis on Thursday October 14, 2021 from 4:00 to 6:00 p.m. and Saturday October 16, 2021 from 11:30 a.m. to 2:00 p.m. The hours selected for analysis were consistent with those investigated for the Placer County Winery and Rural Breweries ordinance EIR Traffic Impact Analysis. These volumes are presented in Figure 4.

TABLE 3
EXISTING DAILY TRAFFIC VOLUMES

Roadway	Location	Number of Lanes – Facility Classification	Daily Volume
Taylor Road	Callison Road to Newcastle	Arterial – Moderate Access Control	4,659
Taylor Road	English Colony Way to Callison Road		5,324
Clark Tunnel Road	Callison Road to English Colony Way	Rural 2-lane Highway – Rolling Terrain	675
Callison Road	Clark Tunnel Road to Sisley Road	*Rural 2 lane road – Mountainous Terrain (< 18 feet of pavement)*	245
Callison Road	Sisley Road to Taylor Road	*Rural 2 lane road – Mountainous Terrain (< 18 feet of pavement)*[1]	576
Sisley Road	Callison Road to Taylor Road	*Rural 2 lane road – Mountainous Terrain (≥ 18 feet of pavement)*[1]	193



EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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5765-25 RA 9/8/2022

figure 4

Existing Pedestrian, Bicycle and Transit Facilities

There are limited pedestrian, bicycle and transit facilities in the immediate area of the project as described below. The facilities appear to be limited to locations where frontage roadway improvements have been completed as a result of development

Sidewalks and Paths. Sidewalks do not exist along the rural roads in the vicinity of the project. Pedestrians make use of whatever shoulder is available or mix with other vehicles on the lightly traveled roads near the project. As noted below in the discussion of bicycles, a path exists along English Colony Way near Penryn Elementary School.

Bicycles and Trails. The *Placer County Regional Bikeway Plan (RBP)* (Placer County Transportation Planning Agency, 2018) specifies future bicycle paths, lanes, and routes (Class I, II, III and IV, respectively.
http://pctpa.net/library/BikewayPlanning/PlacerCounty_RegionalBikewayPlan_FINAL_20180629.pdf

Classification. Trails and bikeways are classified as follows:

- Class I Bikeway (Bike Path) provides a completely separated facility designed for the exclusive use of cycles and pedestrians.
- Class II Bikeway (Bike Lane) provides on-road striped lanes with signs and pavement markings and legends with restricted travel to motor vehicles and pedestrians. Through travel by motor vehicles or pedestrians is prohibited, but crossflows by pedestrians and motorists is permitted.
- Class III Bikeway (Bike Route) provides on-street routes designated by signs or permanent markings and shared with pedestrians and motorists.
- Class IV Bikeway (Separated Bikeway) is a bikeway for the exclusive use of bicycles similar to a Class II facility, but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

Existing Facilities. Class I path exists in Penryn along English Colony Way in the area east of Penryn Elementary School to the UPRR crossing. Class II bike lanes exist along Taylor Road.

Use. The RBP suggest that Taylor Road, English Colony Way, Rock Springs Road, Indian Hill Road, Newcastle Road and SR 193 are all *High Use Recreational Routes.*

Suggested Facilities. The RBP suggests that separated bike lanes (Class IV) could be developed along Taylor Road from the Loomis town limits to the Ophir Road interchange. On-street bikeways (Class II) are suggested for English Colony Way from the Elementary School to Taylor Road and for SR 193. A designated bike route is suggested for English Colony Way west of the Elementary School to Sierra College Blvd and for Newcastle Road south of I-80. A bike route with climbing lanes is suggested for Indian Hill Road from I-80 to the Auburn city limits.

Transit Services. ***Placer County Transit (PCT)*** provides bus service to most of the urbanized south Placer County area, but services are limited in the rural study area addressed by this analysis. The Auburn Station on Nevada Street in the City of Auburn is the hub for service in Western Placer County. PCT's *Taylor Road Shuttle* travels between Auburn and Sierra College in Rocklin. This route follows Ophir Road between Auburn and the Ophir Park-&-Ride lot on I-80 (Stop 5001) and then follows Taylor Road to Newcastle Hwy & Taylor Road (Stop 5002) and Taylor Road & English Colony Way (Stop 5003). Stop 5003 is about 1¼ miles from the project's access on Callison Road. This route provides service Mondays through Saturdays from 6:40 a.m. to 8:20 p.m. This shuttle will deviate 3/4 mile from Taylor Road on reservation only.

PROJECT TRAVEL CHARACTERISTICS

The transportation impacts and traffic operational effects associated with the Project 8 Winery have been determined by estimating the number and directional distribution of project trips and employing that information to identify the project's impacts to regional Vehicle Miles Traveled (VMT) and safety.

The development of this project will attract automobile traffic to the project site, as well as truck traffic associated with winery operations and potentially pedestrians and bicyclists. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.

The text which follows summarizes an assessment of the proposed project's vehicle trip generation estimates that is described in greater detail in the Local Traffic Operations Analysis (LTA) that is included as an appendix to this report.

Vehicular traffic associated with the Project 8 Winery will result from the regular daily operation of the winery and its grounds, by activities during harvest and from travel by visitors to the winery, including travel for events permitted under the Placer County Wineries and Rural Breweries Ordinance or as requested by the project proponents.

- Regular Winery Operations including travel by employees, and by guests
- Event traffic
- Truck traffic throughout the year and during harvest.

Project 8 Winery Trip Generation – Regular Operations

Employee Traffic. There are expected to be 12 employees on site on a weekday during most of the year, and employees would generate 24 daily trips. During harvest the number of employees could increase to 17 persons generating 34 trips per day.

Regular Visitor Traffic. 50 visitors per day are expected, and assuming 2.5 persons per vehicle, 40 daily vehicle trips would result.

Accessory Restaurant Traffic. The accessory restaurant will operate on a reservation only basis. The restaurant will support events, and the project proponents may close the restaurant to reservation-based dining during Special Events and Ag Promo Events. The extent to which the accessory restaurant generates trips that are not associated with events and wine tasting has been estimated based on the trip generation rates presented in the Institute of Transportation (ITE) Trip Generation Manual, 11th Edition and is based on the number of seats available. A freestanding "fine dining" restaurant with 32 seats could generate 84 weekday trips and 82 Saturday trips.

Trucks. Trucks of various sizes may be used to haul grapes to the site during harvest, to bring glass / cork / boxes to the site, and to transport finished products. At full production, a total of 33 truckloads of grapes are expected annually, which is equivalent to 2½ deliveries per week over the 13.5 week-long crush. Over the harvest another 13 deliveries of fermentation supplies and laboratory testing would occur. Outside of the harvest a total 77 large truckloads and 13 UPS sized truckloads would come to the site or an average 2.3 deliveries per week, along with one garbage truck per week.

Total Daily and Peak Hour Trips without Events. Table 4 presents the project's daily and peak hour trip generation estimate for days without events. As indicated, on days outside of the harvest the winery could generate 148 to 152 daily trips. Those estimates could increase to 164 to 166 daily trips during the harvest.

TABLE 4
REGULAR TRIP GENERATION ESTIMATE WITH NO EVENTS

Description		Trip End Generation							
		Weekday				Saturday			
			PM Peak Hour (4:00 to 6:00 p.m.)				(Noon to 2:00 p.m.)		
		Daily	In	Out	Total	Daily	In	Out	Total
Non-Harvest									
Regular Operations	Trucks	2	-	-	-	0	-	-	-
	Employees (12)	24	0	8	8	24	-	-	-
	Visitors / Tasting	40	1	4	5	40	2	3	5
	Miscellaneous	2	1	1	2	2	-	-	-
	Subtotal	***68***	***2***	***13***	***15***	***66***	***2***	***3***	***5***
	Restaurant (ITE)	84	6	3	9	82	6	5	11
	TOTAL	**152**	**8**	**16**	**24**	**148**	**8**	**8**	**16**
During Harvest									
Regular Operations	Trucks	2	0	0	0	2	1	1	2
	Employees (17)	34	0	12	12	34	-	-	-
	Visitors / Tasting	40	1	4	5	40	2	3	5
	Miscellaneous	6	1	1	2	6	1	1	2
	Subtotal	***82***	***2***	***17***	***19***	***82***	***4***	***5***	***9***
	Restaurant (ITE)	84	6	3	9	82	6	5	11
	TOTAL	**166**	**8**	**20**	**28**	**164**	**10**	**10**	**20**

Trip Generation Characteristics of Events

The amount of vehicle traffic associated with events at the Project 8 Winery has been estimated based assumptions made for the Placer County *Wineries and Farm Breweries Ordinance EIR (WFBOEIR)* that involved attendance estimates, automobile occupancy and assumptions as to the time of day when events may occur. Resulting trip generation estimates were then annualized based on the number of times each event is reasonably anticipated to occur each year.

Project 8 Winery Event Characteristics. The extent to which the trip generation assumptions for events at Project 8 Winery will differ from those made for the WFBOEIR has been considered with regards to these factors.

1. The project proposes to increase the maximum permitted attendance for ag promotional events from 50 to 75 persons. The change will increase the trip generation estimate, and the trip generation formula has been adjusted accordingly.
2. The project anticipates being open seven days a week. These hours exceed the typical operation of Placer County wineries which are most commonly open Friday-Sunday.
3. The WFBO does not limit the number of ag promotional events. This analysis assumes a reasonably anticipated total of 208 ag promotional events plus 12 special events annually, which is consistent with the WFBOEIR assumptions.
4. The WFBOEIR analysis did not assume that wineries would need extra staff for special events. The project description notes that extra staff will be needed, and 5 additional staff have been assumed.

Project 8 Winery Event Trip Generation. Table 5 notes the derivation of weighted average Project 8 Winery events trip generation as a redline to the WFBOEIR's assumptions. As shown, 140 average daily trips are forecast with 40 trips in the p.m. and Saturday peak hours.

TABLE 5
ANNUAL WEIGHTED AVERAGE PROJECT 8 WINERY EVENT TRIP GENERATION RATES / FORECASTS

Facility	Description	Quantity (persons)	Number of Annual Events	Frequency		Trips per Total Allowed Events							
						Weekday				Saturday			
						Average Daily	PM Peak Hour			Average Daily	Afternoon Peak Hour		
							In	Out	Total		In	Out	Total
Project 8 Winery	Regular Ag Promo Event	**75**	95[1]	95/115	Average Rate	60	8	7	15	60	15	0	15
				82.6%	Weighted	49.6	6.6	5.8	12.4	49.6	12.4	0	12.4
	Rolling Ag Promo Event	**75**	8[1]	8/115	Average Rate	180	30	30	60	180	30	30	60
				7.0%	Weighted	12.6	2.1	2.1	4.2	12.6	2.1	2.1	4.2
	Special Event	200	12	12/115	Average Rate	160	40	40	80	160	80	0	80
		5 employees				10	0	0	0	10	0	0	0
				10.4%	Weighted	17.7	4.1	4.2	8.3	17.7	8.3	0	8.3
	Weighted Average Per Primary Event		115[1]	100%		79.9	12.8	12.1	24.9	79.9	22.8	2.1	24.9
	Regular Ag Promo Event – Secondary	**75**	105	100%	Average Rate	60	7	8	15	60	15	0	15
	Overall Trip Generation for Events at Project 8 Winery (sum of weighted events and 2nd Ag Promo Event)					**140**	**20**	**20**	**40**	**140**	**38**	**2**	**40**

[1] Sum of regular ag promotional events is 95+8 +105 = 208

Sum of Regular Operation Trips and Event Trip Generation

Table 6 presents the sum of trips associated with regular operations at the Project 8 Winery and annualized events. In this "worst case" estimate for the traffic operational analysis, the ITE trip generation for the restaurant is included, and the annualized events trip generation is the contribution for special events. This estimate is conservative as accessory restaurant use and special events may not normally occur on the same day. As indicated, the forecasts for days without harvest range from 288 to 292 daily trips, with 304 to 306 daily trips during harvest.

TABLE 6
COMPOSITE TRIP GENERATION ESTIMATE FOR TRAFFIC OPERATIONS ANALYSIS

	Trip End Generation							
	Weekday				Saturday			
		PM Peak Hour (4:00 to 6:00 p.m.)				(Noon to 2:00 p.m.)		
Description	**Daily**	**In**	**Out**	**Total**	**Daily**	**In**	**Out**	**Total**
Non-Harvest – With Annualized Events								
Regular Operations	68	2	13	15	66	2	3	5
Restaurant (ITE)	84	6	3	9	82	6	5	11
Average Annual Events	140	20	20	40	140	38	2	40
Total	**292**	**28**	**36**	**64**	**288**	**46**	**10**	**56**
During Harvest – With Annualized Events								
Operations	82	2	17	19	82	4	5	9
Restaurant (ITE)	84	6	3	9	82	6	5	11
Average Annual Events	140	20	20	40	140	38	2	40
Total	**306**	**28**	**40**	**68**	**304**	**48**	**12**	**60**

Annual Average Daily Trip Generation

The composite trip generation forecast in Table 6 above represents the "worst case" conditions on days when events occur assuming the accessory restaurant is operating as a "free standing" use. Because there will be other days throughout the year when the Project 8 Winery does not host events, or days when the restaurant will only be supporting events and not generating its own trips the composite estimate does not represent the overall "average" condition through the year, as is applicable to Vehicle Miles Traveled (VMT) impact screening.

The annual average daily trip generation is presented in Table 7 and is based on the number of days per year that each operation or activity will occur. Under these assumptions, the project could generate a total of 67,728 trips annually from all activities. Spread across 365 days, the annual average daily trip generation is estimated to be 185.6 daily vehicle trips.

TABLE 7 ANNUAL AVERAGE DAILY TRAFFIC					
Operation / Activity	**Harvest?**	**Day**	**Annual Days**	**Trips per Day**	**Total Annual Trips**
Regular Operations	No	weekday	200[1]	68	13,600
	No	weekend	80[2]	66	5,280
	Yes	weekday	60[3]	82	4,920
	Yes	weekend	24[4]	82	1,968
Restaurant – Lunch / Dinner	both	all	320[5]	83[6]	26,560
Average Annual Events			110[7]	140	15,400
Total			**365**	**185.6**	**67,728**

[1] 40 non-harvest weeks times 5 weekdays per week
[2] 40 non-harvest weeks times 2 weekend days per week
[3] 12 harvest weeks times 5 weekdays per week
[4] 12 harvest weeks times 2 weekend days per week
[5] assumes restaurant is open on 265 "non-event" days and ½ of the 110 event days, or 320 days annually
[6] weighted average of 5 weekdays and 2 weekend days at the Saturday rate
[7] 220 events assuming two per day is 110 annual event days

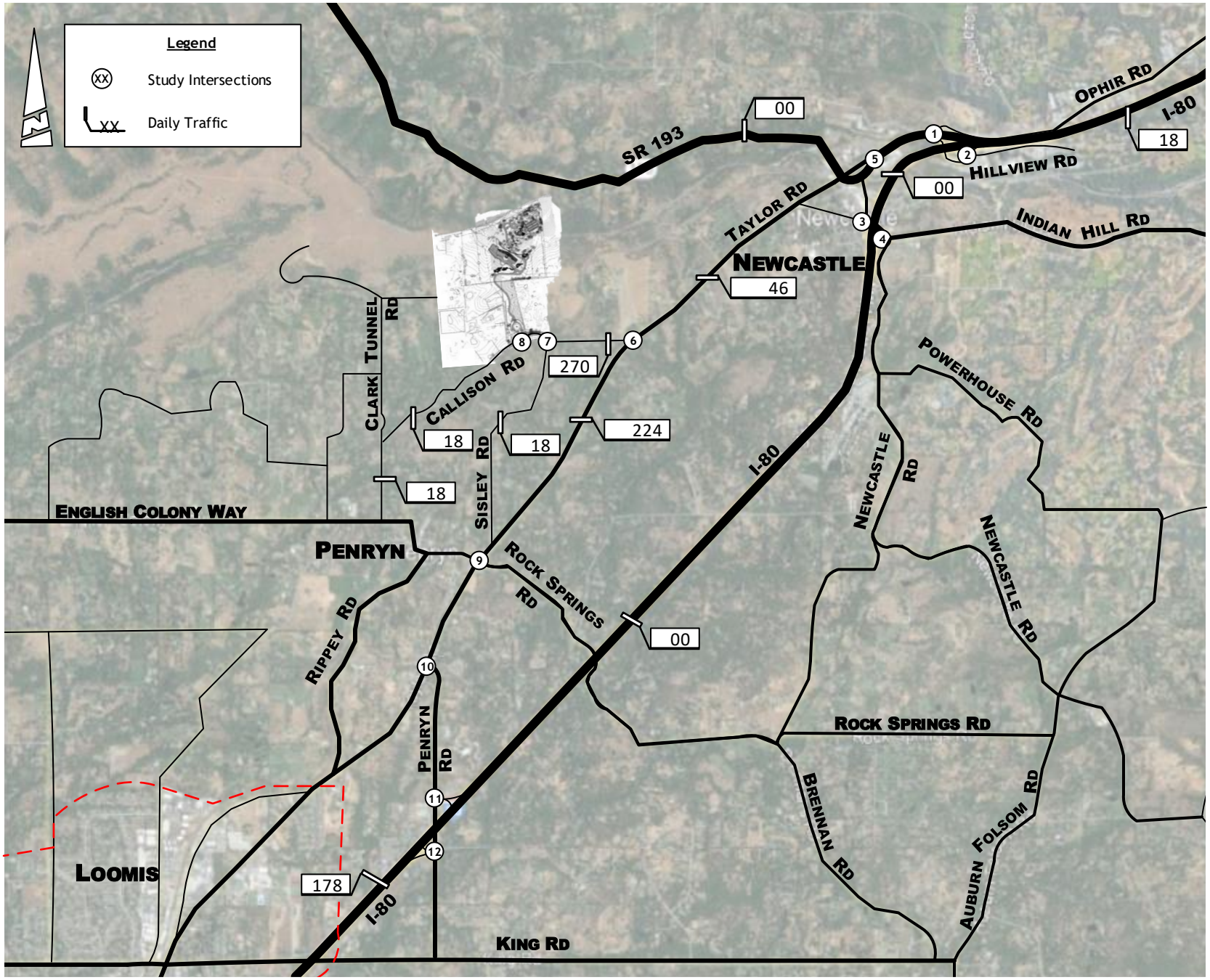
Trip Distribution and Assignment

Trip Distribution. Table 8 summarizes the trip distribution assumptions made for each aspect of the project including travel by guests, employees and trucks.

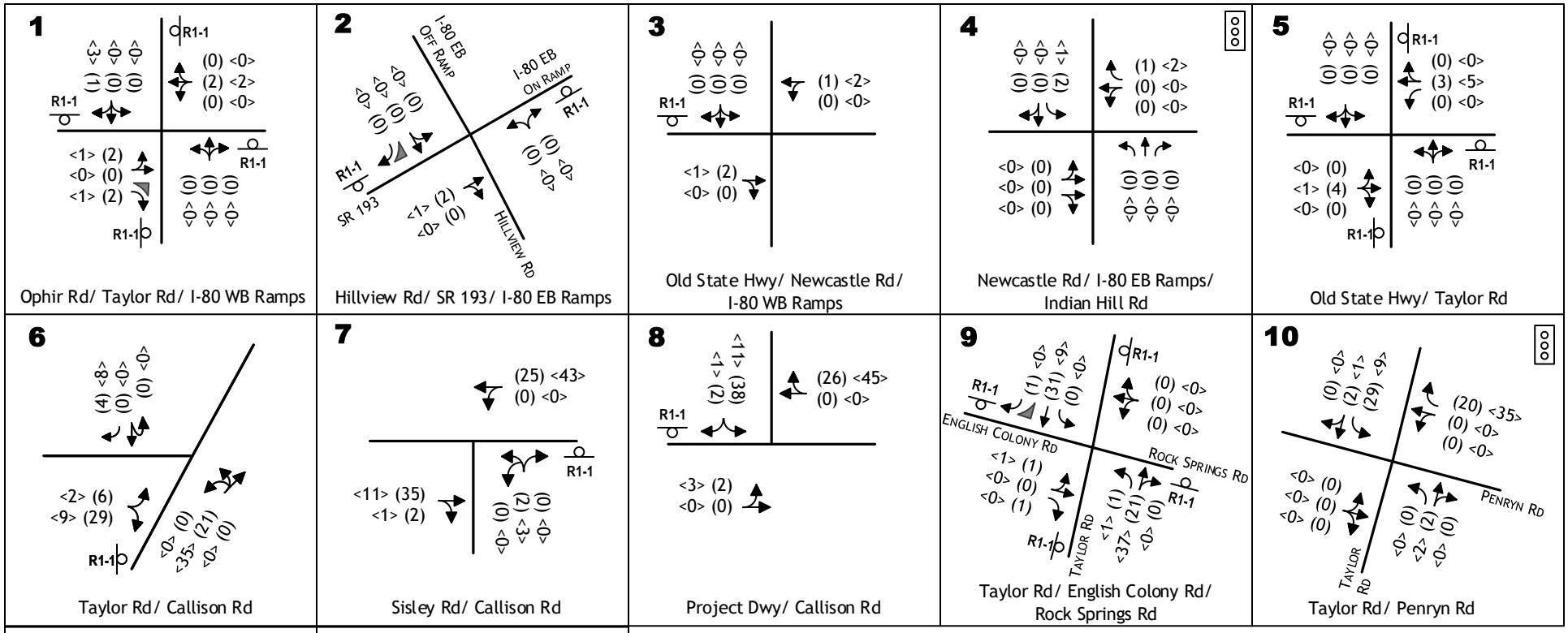
TABLE 8 PROJECT 8 WINERY TRIP DISTRIBUTION ASSUMPTIONS							
	Percent of Total Trips						
	West		**North**	**East**	**South**	**Other Placer Co Wineries**	**TOTAL**
	Sacramento, Roseville, SF Bay Area	**Loomis, Rocklin**	**Lincoln , Yuba Co, Sutter Co**	**Auburn, Nevada Co, Reno**	**Granite Bay, Folsom**		
Trucks	100%	0%	0%	0%	0%	0%	100%
Employees	50%	10%	10%	15%	15%	0%	100%
Miscellaneous	50%	5%	10%	15%	15%	0%	100%
Tasting - Weekday	60%	5%	5%	15%	15%	0%	100%
Tasting - Weekend	50%	2.5%	2.5%	10%	10%	25%	100%
Events	60%	5%	5%	15%	15%	0%	100%
Restaurant	60%	5%	5%	15%	15%	0%	100%
Daily Trip Distribution – During Harvest							
Weekday	180	17	17	46	46	0	306
Saturday	**176**	**16**	**16**	**43**	**43**	**10**	**304**

Project Trip Assignment

The assignment of project traffic to the local area road system will reflect the alternative routes available between the site and eventual trip destinations and the travel time along each route. Figure 5 presents resulting "project only" weekday daily trips during harvest, while Figure 6 presents similar information for peak hours conditions at the study intersections.



PROJECT ONLY AVERAGE DAILY TRAFFIC VOLUMES



PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

5765-25 RA 9/8/2022

figure 6

CEQA TRANSPORTATION IMPACTS

This report section identifies transportation impact under current CEQA requirements and Placer County guidelines.

Vehicle Miles Traveled Analysis Screening

Vehicle Miles Traveled (VMT) refers to the amount and distance of vehicle travel attributable to a project. VMT generally represents the number of vehicle trips generated by a project multiplied by the average trip length for those trips. For CEQA transportation impact assessment, VMT shall be calculated using the origin-destination VMT method, which accounts for the full distance of vehicle trips with one end from the project.

Process. Placer County Transportation Study Guidelines present direction for assessing VMT impacts for land development projects within Placer County in compliance with CEQA Guidelines Section 15064.3. The County guidelines address several aspects of VMT impact analysis, and is organized as follows:

- ***Screening Criteria***: Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- ***Significance Thresholds***: Significance thresholds define what constitutes an acceptable level of VMT and what is considered a significant level of VMT requiring mitigation.
- ***Analysis Methodology***: These are the procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- ***Mitigation***: Projects that are found to have a significant VMT impact based on the County's significance thresholds are required to implement mitigation measures to reduce impacts to a less than significant level (or to the extent feasible). The County guidelines contain a suite of potential mitigation measures to reduce VMT.

Screening Criteria - Evaluation. Screening criteria can be used to quickly identify whether sufficient evidence exists to presume a project will have a less than significant VMT impact without conducting a detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Projects meeting at least one of the criteria below can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

The following screening criteria are applicable for projects in unincorporated Placer County. The extent to which the proposed project qualifies under each criterion is also noted.

- ***Small Projects:*** Defined as a project that generates 110 or fewer average daily vehicle trips or less than 880 VMT on a typical day. The types of projects that generate under 880 daily VMT include the following:

- 17 or fewer single family dwelling units
- 22 or fewer multi-family dwelling units
- 10,000 square feet or less of office uses
- 22,200 square feet or less of light industrial uses
- 63,200 square feet or less of warehouse uses

Assessment. The proposed project is estimated to generate 171.9 average annual daily trips. This value exceeds the 110 daily trip threshold established under Placer County guidelines.

Conclusion. This criterion applies, and the project's impact cannot be presumed to be less than significant based on its trip generation forecast.

Project 8 Winery VMT Analysis

Significance Criteria. Placer County's Transportation Study Guidelines identify the thresholds of significance shown in Table 9 for those projects that cannot be screened out. This project has been assessed under the Commercial Retail category, and Zero Net Increase in VMT is the applicable threshold.

TABLE 9
CEQA VMT THRESHOLDS OF SIGNIFICANCE BY PROJECT TYPE

Land Use / Project Type	Recommended Metric[1]	Threshold for Determination of a Significant Transportation Impact
Residential	VMT per Resident	15% below unincorporated County baseline (for projects in Western Placer County), or 15% below eastern County baseline (for projects in eastern Placer County)
Office Employment	Work VMT per employee	
Commercial Retail	Total VMT	Zero Net Increase
Recreation Destination		

Notes:
1. Recommended metric is specified, but other metrics can be utilized, at the discretion of DPW. Refer to Appendix C for definition of recommended metrics.
2. Projects that exceed these thresholds would have a significant VMT impact. Refer to Appendix C for threshold justification. The threshold value should be established using same methodology used for analysis of the project. The unincorporated County baseline for western Placer County refers to the average VMT metric for the area west of Donner Summit, excluding Sugar Bowl Ski Resort and Serene Lakes. The eastern County baseline refers to the average VMT metric for the areas east of Donner Summit, including Sugar Bowl Ski Resort and Serene Lakes.
3. DPW staff will determine if a project is a Recreation Destination or Recreational Amenity

Project VMT Estimate. The Placer County Transportation Study guidelines suggest that a regional travel demand forecasting model can be the applicable tool for quantifying a project average daily VMT. However, review of the SACSIM model employed under County guidelines indicates that wineries are not a land use that can be represented in the travel demand model. Thus, an alternative approach was needed and was selected in consultation with Placer County staff.

Approach. For this analysis GIS based cell phone "big data" developed by *StreetLight Data Corp* was employed. StreetLight Data information has been used extensively over the last few years by traffic engineers to identity roadway traffic volumes when the effects of COVID-19 made traditional traffic counts unrepresentative of "regular" conditions. The same technology employed to review historic volume data for roadways can also be employed to isolate and quantify the travel associated with trips made to and from a specific geographical area, including areas as small as rural wineries.

The following steps were taken to use StreetLight Data information to complete the Project 8 Winery VMT estimate:

- Identify Placer County wineries where geographical conditions make it possible to collect StreetLight Data information.
- Review a list of wineries outside of Placer County that are similar to the proposed project to identify those where StreetLight Data information can be collected.
- Use StreetLight Data information to identify the 2019 annual average daily VMT and average trip length for the wineries.
- Apply the average trip length from similar wineries to the Project 8 Winery's average annual daily trip generation estimate to determine its average daily VMT.

Average Trip Length. Table 10 presents the wineries where Average VMT was identified and average trip length was determined. In each case the total annual VMT addresses all travel to and from the winery, including trips by employees, guests and deliveries. As indicated, six Placer County wineries and one rural event center were investigated. Five similar California wineries were also assessed. The average trip length for these Placer County wineries ranged from a low of 9.82 miles to a high of 12.31 miles. The average for these six wineries was 11.09 miles.

The information developed for other similar wineries is also presented. As indicated the average trip length for those five locations ranged from 12.14 miles to 16.49 miles, and the average was 13.80 miles.

TABLE 10
AVERAGE TRIP LENGTH FOR OTHER WINERIES

Parameter	Placer County Wineries							Similar California Wineries						Wise Villa Winery
	Mt. Vernon	Dono Del Cielo	Lone Buffalo	Vina Castellano	Rock Hill	Giotti Cellars	Average	Avonsole	Mount Palomar	Palmaz	Davis Estates	Naggier Winery	Average	
Location	Placer County							Temecula	Temecula	Napa	Calistoga	Grass Valley		Placer County
Characteristics														
Placer Co Classification	Large	large	Medium	Medium	Medium	Small								Note[1]
0Events Offered	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		
Restaurant	No	No	No	No	No	No		Yes	Yes	No	No	No		Yes
Full Liquor License	No	No	No	No	No	No		Yes	Yes	No	No	No		
Tasting Days Open	ThFSaSu	ThFSaSu	FSaSu	ThFSaSu	SaSu	FSaSu		Daily	Daily	Res	Daily	F Sa Su		Daily
Food Days Open	N/A	N/A	N/A	N/A	N/A	N/A		MThFSaSu	WThFSaSu	N/A	N/A	N/A		Daily
VMT and Average Trip Length														
Annual Ave Daily VMT	783	927	727	1,096	388	484		6,228	4,794	1,488	1,421	1.486		3,807
Average Trip Length	10.3	11.88	9.82	12.31	11.07	10.74	11.09	12.79	15.46	13.05	12.14	12.14	13.80	15.54

[1]Rural Events Center

To place these estimates in perspective, the distance from the Placer County winery with the longest average trip length, Vina Castellano, to the Auburn City Hall is 6.4 miles, to the Roseville City Hall is 22.3 miles and to the Sacramento City Hall is 39.0 miles. The distance from Lone Buffalo, the Placer County winery with the shortest average distance, is 5.9 miles to Auburn City Hall, 17.5 miles to the Roseville City Hall and 34.8 miles to Sacramento's City Hall, as shown in Table 11.

TABLE 11
COMPARABLE TRAVEL DISTANCES

Destination	Lowest Ave Trip Length	Highest Ave Trip Length	Project 8 Winery Site
	Lone Buffalo	Vina Castellano	
Auburn City Hall	5.9	6.4	5.5
Roseville City Hall	17.5	22.3	12.1
Sacramento City Hall	34.8	39.0	28.0

Project 8 Winery Daily VMT. As noted previously, under the Commercial Retail Land Use Category the significance threshold for VMT is Zero Net Increase in total regional VMT. For this analysis it has been assumed that the daily trips generated by the Project 8 Winery will have an average trip length that is the average identified for similar wineries elsewhere (i.e., 13.80 miles). This assumption is conservative because the project site is located closer to major population centers to the west than other Placer County wineries. Applying that trip length to the project's 185.6 average annual daily trip forecast yields an estimate of 2,561 daily VMT, as shown in Table 12.

As also noted in Table 12, the proposed project VMT would represent 0.026% of the total VMT generated in Placer County. Because the project will increase total regional VMT (i.e. greater than Zero Net Increase), its impact is significant.

TABLE 12
PROJECT 8 WINERY VMT ESTIMATE

Area	Average Annual Daily Trips	Average Trip Length	Total Daily VMT	Percent Increase in Total Regional VMT
Project 8 Winery	185.6	13.80	2,561	-
Placer County			10,025,561[1]	0.026%
SACOG Region				

[1] Placer County 2040 Regional Transportation Plan Table 6.1-4

Mitigation Alternatives. Under County guidelines, if a project would result in VMT levels that exceed the thresholds identified the project would have a significant transportation VMT impact that must be mitigated by reducing the project's VMT to the extent feasible. Typically, VMT is reduced by implementing strategies that achieve one of the following:

- Reducing the number of automobile trips generated by the project (i.e., trip generation).
- Reducing the distance that people drive (i.e., trip length)

Table 4 of the Transportation Study Guidelines list potential mitigation measures for all types of plan uses, not all of which may be applicable to any individual project. Table 13 reports this table.

TABLE 13
EXAMPLES OF POTENTIAL VMT MITIGATION MEASURES

Category	Measure
Project Changes	Locate the project in an area of the region that already exhibits low VMT Locate the project near transit Increase project density Increase the mix of uses within the project or within the project's surroundings Increase connectivity and/or intersection density on the project site Increase access to common goods and services, such as groceries, schools and daycare Incorporate affordable housing into the project
Parking	Limit parking supply Unbundle parking costs Provide parking cash-out programs Price workplace parking
Transit	Improve or increase access to transit Reduce transit headways Implement neighborhood shuttle Provide partially or fully funded transit passes Provide incentives or subsidies that increase the use of modes other than single-occupancy vehicles
Commute Trip Reductions	Implement a commute reduction program Provide work options Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, showers and locker rooms and bicycle repair service Employer or association-sponsored van-pool, circulator, or shuttle Rideshare program Provide a guaranteed ride home service to users of non-auto modes
Shared Mobility	Provide car-sharing, bike sharing, and ride sharing programs Shift single occupancy vehicles trips to carpooling or vanpooling by providing ride-matching services or shuttles services Other shared mobility devices School carpool program
Neighborhood Enhancement	Orient project towards transit, bicycle or pedestrian facilities Improve pedestrian or bicycle networks Traffic calming Shared use paths
Source: Placer County Transportation Study Guidelines, Table 4	

Feasible mitigation measures for this impact are limited. Most mitigation measures that reduce VMT have low to negligible effects in rural areas, such as bike lanes, transit network improvements, and pedestrian networks. Other mitigation measures are not applicable, such as diversification or intensification of land uses on the project site.

Potential mitigation measures could include:

1. **Guest Carpooling Incentives.** Car Pooling by guests could be promoted by offering an incentive to guests who arrive with four or more persons in a vehicle. This measure could be difficult to administer on a regular basis as it would be necessary to monitor the arrival of individual parties of guests to identify qualifying vehicles and to provide an incentive to individual drivers. Alternatively, it may be feasible to monitor the arrival of guests during a particular individual event which has a specific, limited arrival time for the majority of its guests and an organizer who can administer / coordinate carpooling. A corporate gathering could be this type of event where the incentive could be negotiated with the event organizer. In each case the extent of the required incentive is unknown.
2. **Event Guest Shuttle Service.** The proponents could offer shuttle service during large events with specific guest origins from a satellite parking location such as the park & ride facilities on Interstate 80 or South Placer County area hotels. Typically, guest shuttles are used to compensate for a venue's lack of parking or inaccessibility. In this case the roads to the site are adequate and on-site parking will be available. The effectiveness of this alternative would be linked to the nature of the guests for a particular event and the willingness of the event promoter to direct guest to a satellite location. This alternative is not likely to be effective if on-site parking is available.
3. **Facilitate Other Guest Transit.** Event organizers may determine that it is desirable to provide bus service to the site. This could be the case for an event attracting a specific group of guests originating at a particular location. To promote transit use the Project 8 Winery proponent could provide priority parking for event busses on the site.
4. **Employee Transit Incentives.** Project proponents could provide employees with information regarding transit availability and could offer employee incentives to use transit, including subsidized transit passes. A shuttle service to the Taylor Road / English Colony Way transit stop could be provided. It is feasible to provide transit information and to offer subsidize transit passes to interested employees. A shuttle to the transit stop does not appear economically feasible due to the limed number of on-site employees.
5. **Employee Carpool Incentives.** Project proponents could offer incentives to carpool such as priority parking for carpools or rideshare matching service. Designating carpool parking spaces is feasible, as is an informal matching service. Carpool effectiveness is dependent on employee residence locations. In this situation carpooling may be ineffective since the number of employees is low (i.e., 12 regular employees and 17 during harvest) and potential residences are across a broad geographical area.

Effectiveness of Alternatives. While it may be possible to implement some of these alternative mitigations, the extent to which they would be used and their effectiveness in reducing project VMT is uncertain. Minor changes to employee trip generation caused by carpooling or transit use would have a correspondingly low effect on total project VMT.

For example, if 10% of employee daily trips were eliminated by use of carpooling or transit, the project's average annual daily trip generation would be reduced by 2.6 daily trips, and the project's estimated VMT could be reduced by 1.4%. (i.e., 2.6/185.6 = 1.4%).

Guest oriented carpooling incentives could reduce the project's average daily VMT slightly. If incentives resulted in pooling by ½ of the 200 guests for one of the 12 permitted special events, the average daily VMT could be reduce by:

- 100 persons / 2.5 persons per vehicle x 2 trips per vehicle is 80 daily trips eliminated
- 100 persons / 4.0 persons per vehicle x 2 trips per vehicle is 50 trips added
- 30 trips eliminated times 13.8 miles per trips is 414 event VMT
- 414 event VMT / 365 days per year is 1.1 annual average daily VMT reduction
- 1.1 VMT is 0.6% of total project average daily VMT

Guest oriented transit use would reduce the project's average daily VMT slightly. If busses were employed to transport ½ of the 200 guests for one of the 12 permitted special events, the average daily VMT could be reduce by:

- 100 persons / 2.5 persons per vehicle x 2 trips per vehicle is 80 daily trips eliminated
- 100 persons / 40 persons per bus x 2 trips per bus is 5 trips added
- 75 trips eliminated times 13.8 miles per trips is 1,035 event VMT
- 1035 event VMT / 365 days per year is 2,8 annual average daily VMT reduction
- 2.8 VMT is 1.5% of total project's average daily VMT

The following mitigations are required.

> **Mitigation T-1.** The project proponents shall obtain and distribute to employees and guests information regarding the availability of Placer Transit service in the project area.
>
> **Mitigation T-2.** The project proponents shall provide an employee carpool matchings service.
>
> **Mitigation T-3.** The project proponents shall provide an on-site location for guest bus parking.
>
> **Mitigation T-4.** The project proponent shall encourage the organizers of special events, or corporate type agricultural promotional events to carpool.

Implementation of these mitigations could reduce project VMT slightly. Because Placer County cannot ensure that the proposed project will result in zero increase in total regional VMT, the project's **impact is significant and unavoidable.**

Multi-Modal Plan Consistency

The significance of the project's Multi-Modal impacts is discussed in the text which follows.

Bicycle Facilities. The proposed project will reconstruct about 500 feet of Callison Road at the site access to create two 12-foot wide travel lanes and 4-foot shoulders on each side of the road in the vicinity of the site access. It is possible that some guests could elect to ride bicycles to the site, although Callison Road is not recognized as a route that is heavily used by recreational bicyclists. Some employees could elect to ride to the project site. The *Regional Bicycle, Pedestrian and Trails Master Plan*, (SACOG, 2015) indicates that 1.8% of Placer County commuters reported using bicycles. If 2% of the project's employees elected to ride a bicycle, then 1 additional daily bicycle trip might be added to the area circulation system by commute activity.

Assessment. As noted in the existing setting, there are no bicycle lanes on Callison Road or Sisley Road, and any bicyclists would mix with automobiles on the travel way. While the pavement width of Sisley Road ranges from 16 to 22 feet and the width on Callison Road ranges from 16 feet to 24 and there are several horizontal curves along each road, at the low traffic volume levels anticipated with the project, conflicts between motor vehicles and bicyclists are unlikely to increase. By designing and constructing project improvements to Placer County standards, the project does not physically disrupt an existing bicycle facility or interfere with implementation of any planned facility. With the presence of bike lanes on Taylor Road, a continuous bicycle network is available along more heavily traveled roads for any bicyclist who was traveling to the site. The project would not result in a significant increase in bicyclists on a facility that does not have adequate bicycle facilities, such that conflicts between bicyclists and other travel modes would be likely to increase.

Conclusion. The project's impact to Bicycle Facilities is not significant.

Pedestrian Facilities. The project's improvements at its access on Callison Road includes four-foot wide shoulders. Based on its rural location the project is unlikely to generate appreciable pedestrian activity by guests. It is possible that an employee could elect to walk to the Taylor Road / English Colony Way transit stop that is 1¼ miles from the project along Sisley Road. The *Regional Bicycle, Pedestrian and Trails Master Plan*, (SACOG, 2015) indicates that 1.6% of Placer County commuters reported walking. If 2% of the project's employee trips were made on foot, then 1 daily pedestrian might be added to the area circulation system.

Assessment. As noted in the existing setting, there are no sidewalks on Callison or Sisley Roads, and any pedestrians would either walk on unimproved shoulders or mix with automobiles on the travel way. While the pavement width of Sisley Road ranges from 16 to 22 feet and there are several horizontal curves along the road, at the low traffic volume levels anticipated with the project, conflicts between motor vehicles and pedestrians are unlikely to increase. The project does not physically disrupt an existing pedestrian facility nor interfere with implementation of a planned pedestrian facility. The project does not result in an increased presence of vehicles and/or pedestrians on a facility that does not have adequate pedestrian facilities, such that conflicts between pedestrians and other travel modes are likely to increase.

Conclusion. The project's impact to Pedestrian Facilities is not significant.

Transit Service and Facilities. Fixed route transit service runs along Taylor Road in the area of the project today; however, the project does not physically disrupt an existing transit service or facility nor interfere with implementation of a planned transit service or facility. The project's traffic contribution to roads near the Taylor Road / English Colony Way transit stop would be too slight to result in increased travel time for busses that adversely effect on-time performance. While an employee may elect to use the transit service, the project would not result in increased transit ridership demands that result in passenger loads that exceed vehicle loading standards. As the project access is not adjacent to any transit facility, the project does not result in increased potential for safety conflicts involving transit vehicles and other modes of travel.

Conclusion. The project's impact to Transit Service and Facilities is not significant.

General Plan Consistency. The project's consistency with General Plan policies other than LOS has not been reviewed as part of this analysis.

Roadway Design and Users. The improvements proposed to Callison Road at the site access are generally consistent with Placer County design standards, although a design exception will be required. The final design will be determined during improvement plan review. Because improvements will occur within the UPRR right of way, the plans may also be approved by the CPUC.

Without a left turn lane safety conflicts could increase between eastbound Taylor Road traffic and vehicles waiting to turn left onto Callison Road as a result of project traffic and background traffic growth, as noted in the LTA. Conflicts could occur if following traffic failed to perceive a vehicle waiting at the intersection in time to stop or attempted to pass a turning vehicle on the right. This is a significant impact that can be mitigated by constructing a left turn lane designed to Placer County standards.

As addressed in the LTA, the project would not substantially increase hazards to vehicle safety due to geometric design features (e.g., sharp curves or dangerous intersections). Regular site traffic and vehicles visiting the site during construction will be comprised of automobiles and trucks permitted under the California Vehicle Code (CVC) and no farm equipment is expected. The project does not introduce incompatible users (e.g., farm equipment) to a roadway or transportation facility not intended for those users.

Conclusion. The project's impact with regards to Roadway Design and Users is significant.

Mitigation T-3. The project proponents shall construct an eastbound left turn lane on Taylor Road at the Callison Road intersection to the satisfaction of Placer County Department of Public Works with construction of Project 8 Winery Phase 2, or within three (3) years of occupancy of Phase 1 . .

With this mitigation the project's impact is not significant.

State Highways. The project will use state highways for regional access, primarily via the I-80 / Penryn Road interchange. The LTA identified the lengths of 95th percentile queues occurring at key locations during the analysis peak hours and determined that while the project will lengthen eastbound off ramp queues by up to 10 feet the project will not result in queueing at off-ramps resulting in slow or stopped traffic extending past the off-ramp gore point where the freeway and ramp diverge. Project traffic will not negatively affect safety of the State highway facility. Improvements to this location are identified in Placer County's Penryn / Horseshoe Bar / Newcastle Area of Benefit / CIP fee program and the project will contribute to the costs of future improvements by paying adopted fees.

Conclusion. The project's impact with regards to safety on State facilities is not significant.

REFERENCES

1. Placer County *Transportation Study Guidelines,* 2021
2. Placer County *Impact Analysis Methodology of Assessment,* September 2015
3. Placer County, *Engineering Design Plate 116*
4. Placer County *Countywide Traffic Fee Capital Improvement Programs,* 2022
5. Transportation Research Board, *Highway Capacity Manual*, 6th Edition 2018
6. Caltrans *Highway Design Manual*, 2021
7. California *Manual of Uniform Traffic Control Devices*, 2014
8. Institute of Transportation Engineers. 2021. *Trip Generation*, 11th Edition. Washington, D.C.
9. Caltrans Annual Traffic Report, 2020. https://dot.ca.gov/programs/traffic-operations/census

APPENDIX

Traffic Counts

LTA (10-05-2022) Under Separate Cover

Prepared by National Data & Surveying Services

Taylor Rd & Callison Rd

Peak Hour Turning Movement Count

ID: 21-070180-001
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

CONTROL: 1-Way Stop(EB)

	AM	NOON	PM
TEV	0	0	516
PHF			0.88

SOUTHBOUND (Taylor Rd)

	Left	Thru	Right	U-Turn	
AM	0	0	0	0	AM
NOON	0	0	0	0	NOON
PM	12	191	1	0	PM

NORTHBOUND (Taylor Rd)

	Left	Thru	Right	U-Turn	
PM	205	3	8	281	0 PM
NOON	0	0	0	0	0 NOON
AM	0	0	0	0	0 AM

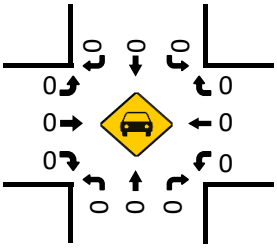
EASTBOUND (Callison Rd)

AM	NOON	PM	
0	0	20	⇦
0	0	0	↶ 0
0	0	9	↱ 0
0	0	0	→ 0
0	0	11	↷ 0
AM	NOON	PM	

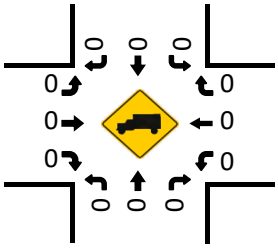
WESTBOUND (Callison Rd)

PM	NOON	AM	
0	0	0	0 ↷
0	0	0	0 ←
0	0	0	0 ↰
0	0	0	0 ↶
1	0	0	⇨
PM	NOON	AM	

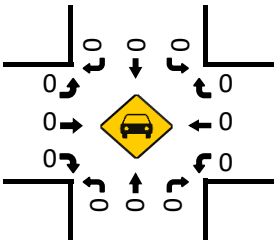
Cars (AM)



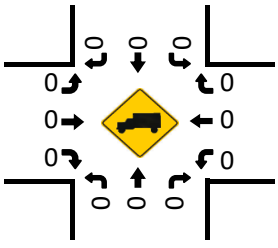
HT (AM)



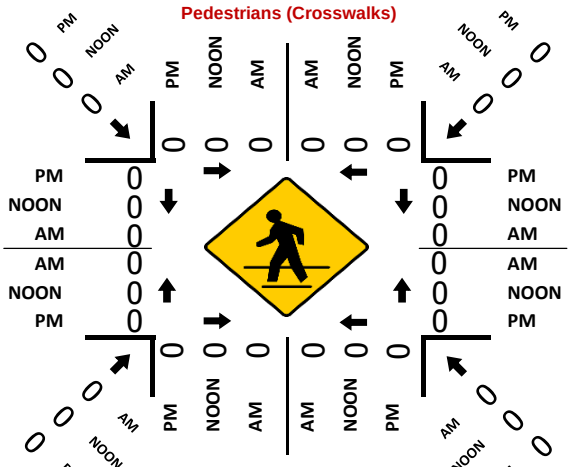
Cars (NOON)



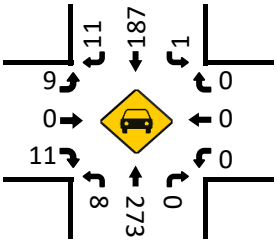
HT (NOON)



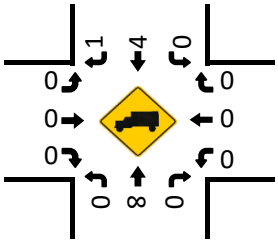
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/14/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	73	0	0	0	38	2	0	5	0	2	0	0	0	0	0	124
4:15 PM	3	65	0	0	0	47	4	0	3	0	2	0	0	0	0	0	124
4:30 PM	4	80	0	0	0	51	4	0	1	0	6	0	0	0	0	0	146
4:45 PM	0	68	0	1	1	47	2	0	2	0	1	0	0	0	0	0	122
5:00 PM	1	68	0	2	0	46	2	0	3	0	2	0	0	0	0	0	124
5:15 PM	2	56	0	0	0	52	6	0	0	0	2	0	0	0	0	0	118
5:30 PM	0	53	0	0	0	37	2	0	2	0	2	0	0	0	0	0	96
5:45 PM	5	56	0	0	0	35	4	0	1	0	1	0	0	0	0	0	102
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	519	0	3	1	353	26	0	17	0	18	0	0	0	0	0	956
APPROACH %'s :	3.51%	95.93%	0.00%	0.55%	0.26%	92.89%	6.84%	0.00%	48.57%	0.00%	51.43%	0.00%					
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	8	281	0	3	1	191	12	0	9	0	11	0	0	0	0	0	516
PEAK HR FACTOR :	0.500	0.878	0.000	0.375	0.250	0.936	0.750	0.000	0.750	0.000	0.458	0.000	0.000	0.000	0.000	0.000	0.884
	0.869				0.927				0.714								

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	71	0	0	0	36	2	0	5	0	2	0	0	0	0	0	120
4:15 PM	3	65	0	0	0	46	3	0	3	0	2	0	0	0	0	0	122
4:30 PM	4	76	0	0	0	49	4	0	1	0	6	0	0	0	0	0	140
4:45 PM	0	67	0	1	1	46	2	0	2	0	1	0	0	0	0	0	120
5:00 PM	1	65	0	2	0	46	2	0	3	0	2	0	0	0	0	0	121
5:15 PM	2	54	0	0	0	50	6	0	0	0	2	0	0	0	0	0	114
5:30 PM	0	53	0	0	0	37	2	0	2	0	2	0	0	0	0	0	96
5:45 PM	5	56	0	0	0	34	4	0	1	0	1	0	0	0	0	0	101
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	507	0	3	1	344	25	0	17	0	18	0	0	0	0	0	934
APPROACH %'s :	3.59%	95.84%	0.00%	0.57%	0.27%	92.97%	6.76%	0.00%	48.57%	0.00%	51.43%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	8	273	0	3	1	187	11	0	9	0	11	0	0	0	0	0	503
PEAK HR FACTOR :	0.500	0.898	0.000	0.375	0.250	0.954	0.688	0.000	0.750	0.000	0.458	0.000	0.000	0.000	0.000	0.000	0.898
	0.888				0.939				0.714								

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/14/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
4:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	12	0	0	0	9	1	0	0	0	0	0	0	0	0	0	22
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	90.00%	10.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	8	0	0	0	4	1	0	0	0	0	0	0	0	0	0	13
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.542
	0.500				0.625												

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.750																

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn

Project ID: 21-070180-001
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		Callison Rd		Callison Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Sisley Rd & Callison Rd

Peak Hour Turning Movement Count

ID: 21-070180-002
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS

AM	NONE
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Sisley Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Callison Rd)

AM	NOON	PM	
0	0	21	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	14	→ 0
0	0	3	↴ 0
AM	NOON	PM	

WESTBOUND (Callison Rd)

PM	NOON	AM	
0	0	0	0 ↰
17	0	0	0 ←
0	0	0	0 ↰
0	0	0	0 ↰
18	0	0	⇨
PM	NOON	AM	

NORTHBOUND (Sisley Rd)

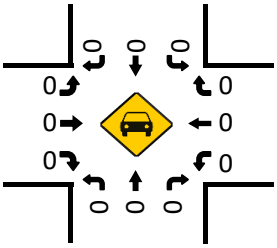
PM	4	1	4	0	4	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

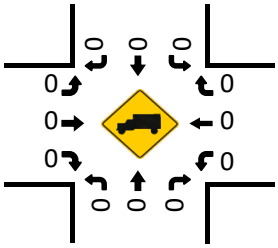
1-Way Stop(NB)

TEV	0 AM	0 NOON	43 PM
PHF			0.90

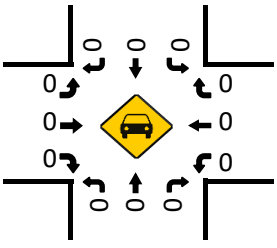
Cars (AM)



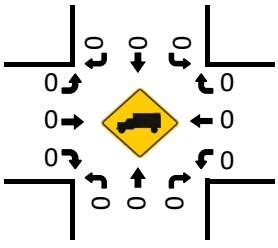
HT (AM)



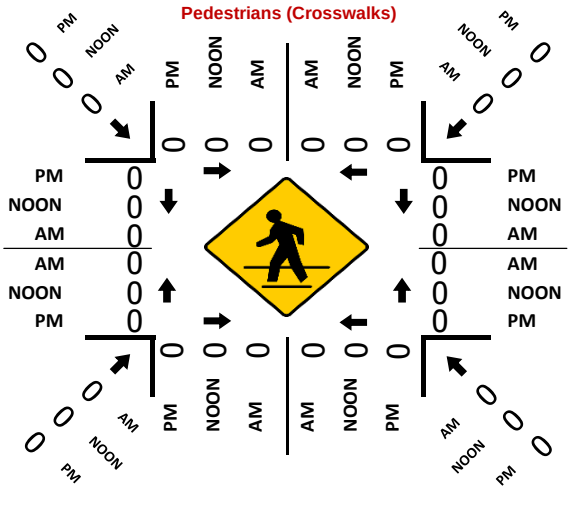
Cars (NOON)



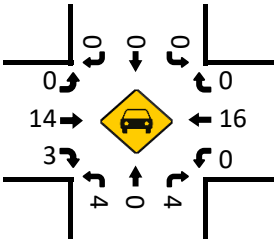
HT (NOON)



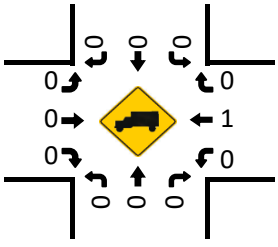
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/14/2021

Data - Total

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	0	0	0	1	0	0	1	4	0	0	8
4:15 PM	1	0	0	0	0	0	0	0	0	7	0	0	1	5	0	0	14
4:30 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	2	0	0	11
4:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	6
5:00 PM	2	0	3	1	0	0	0	0	0	2	0	0	0	4	0	0	12
5:15 PM	0	0	1	0	0	0	0	0	0	3	1	0	0	5	0	0	10
5:30 PM	1	0	0	0	0	0	0	0	0	4	1	0	0	4	0	0	10
5:45 PM	1	0	0	0	0	0	0	0	0	5	1	0	0	4	0	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	0	6	1	0	0	0	0	0	33	3	0	3	30	0	0	82
APPROACH %'s :	46.15%	0.00%	46.15%	7.69%					0.00%	91.67%	8.33%	0.00%	9.09%	90.91%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	4	0	4	1	0	0	0	0	0	14	3	0	0	17	0	0	43
PEAK HR FACTOR :	0.500	0.000	0.333	0.250	0.000	0.000	0.000	0.000	0.000	0.700	0.750	0.000	0.000	0.850	0.000	0.000	0.896
	0.375								0.708				0.850				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	0	0	0	1	0	0	1	4	0	0	8
4:15 PM	1	0	0	0	0	0	0	0	0	6	0	0	1	5	0	0	13
4:30 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	2	0	0	10
4:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	6
5:00 PM	2	0	3	1	0	0	0	0	0	2	0	0	0	4	0	0	12
5:15 PM	0	0	1	0	0	0	0	0	0	3	1	0	0	4	0	0	9
5:30 PM	1	0	0	0	0	0	0	0	0	4	1	0	0	4	0	0	10
5:45 PM	1	0	0	0	0	0	0	0	0	5	1	0	0	4	0	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	0	6	1	0	0	0	0	0	31	3	0	3	29	0	0	79
APPROACH %'s :	46.15%	0.00%	46.15%	7.69%					0.00%	91.18%	8.82%	0.00%	9.38%	90.63%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	4	0	4	1	0	0	0	0	0	14	3	0	0	16	0	0	42
PEAK HR FACTOR :	0.500	0.000	0.333	0.250	0.000	0.000	0.000	0.000	0.000	0.700	0.750	0.000	0.000	1.000	0.000	0.000	0.875
	0.375								0.708				1.000				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/14/2021

Data - HT

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	1	0	0	3	0	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.333
	0.250								0.250				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn

Project ID: 21-070180-002
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sisley Rd		Sisley Rd		Callison Rd		Callison Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Taylor Rd & English Colony Way/Rock Springs Rd

Peak Hour Turning Movement Count

ID: 21-070180-003
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Taylor Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	87	136	6	0	313	PM

EASTBOUND (English Colony Way/Rock Springs Rd)

AM	NOON	PM	
0	0	218	⇦
0	0	0	↶ 0
0	0	85	↱ 0
0	0	25	→ 0
0	0	82	↷ 0
AM	NOON	PM	

WESTBOUND (English Colony Way/Rock Springs Rd)

PM	NOON	AM	
10	0	0	0 ↰
25	0	0	0 ←
41	0	0	0 ↶
0	0	0	0 ↷
98	0	0	⇨
PM	NOON	AM	

NORTHBOUND (Taylor Rd)

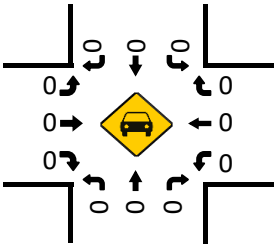
PM	259	0	106	218	67	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL

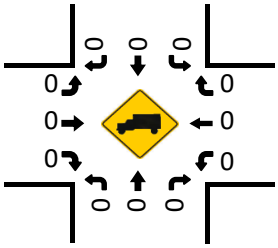
4-Way Stop

TEV	0 AM	0 NOON	888 PM
PHF			0.93

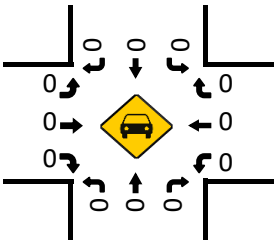
Cars (AM)



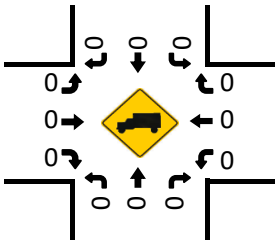
HT (AM)



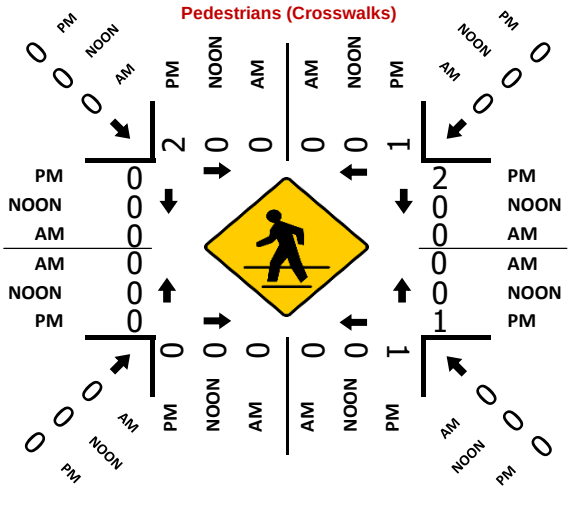
Cars (NOON)



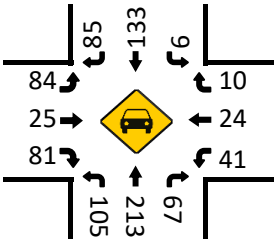
HT (NOON)



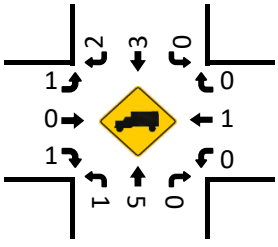
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/14/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	24	57	9	0	0	24	21	0	21	7	14	0	13	6	1	0	197
4:15 PM	26	61	12	0	4	32	23	0	20	5	16	0	10	4	0	0	213
4:30 PM	31	58	21	0	2	40	22	0	26	4	23	0	4	5	3	0	239
4:45 PM	26	52	15	0	0	37	20	0	25	11	17	0	6	9	2	0	220
5:00 PM	26	55	15	0	2	29	25	0	22	3	18	0	10	6	0	0	211
5:15 PM	23	53	16	0	2	30	20	0	12	7	24	0	21	5	5	0	218
5:30 PM	24	37	15	0	1	28	17	0	27	7	22	0	11	3	3	0	195
5:45 PM	32	44	16	0	7	24	16	0	19	3	22	0	12	4	5	0	204
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	212	417	119	0	18	244	164	0	172	47	156	0	87	42	19	0	1697
APPROACH %'s :	28.34%	55.75%	15.91%	0.00%	4.23%	57.28%	38.50%	0.00%	45.87%	12.53%	41.60%	0.00%	58.78%	28.38%	12.84%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	106	218	67	0	6	136	87	0	85	25	82	0	41	25	10	0	888
PEAK HR FACTOR :	0.855	0.940	0.798	0.000	0.750	0.850	0.870	0.000	0.817	0.568	0.854	0.000	0.488	0.694	0.500	0.000	0.929
	0.889				0.895				0.906				0.613				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	24	55	9	0	0	24	21	0	21	7	14	0	13	6	1	0	195
4:15 PM	26	60	12	0	4	31	23	0	19	5	16	0	10	4	0	0	210
4:30 PM	31	57	21	0	2	39	22	0	26	4	23	0	4	5	3	0	237
4:45 PM	25	51	15	0	0	35	20	0	24	11	17	0	6	8	2	0	214
5:00 PM	26	54	15	0	2	29	23	0	22	3	17	0	10	6	0	0	207
5:15 PM	23	51	16	0	2	30	20	0	12	7	24	0	21	5	5	0	216
5:30 PM	24	37	15	0	1	28	17	0	26	7	21	0	11	3	3	0	193
5:45 PM	32	44	16	0	7	24	16	0	19	3	22	0	12	4	5	0	204
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	211	409	119	0	18	240	162	0	169	47	154	0	87	41	19	0	1676
APPROACH %'s :	28.55%	55.35%	16.10%	0.00%	4.29%	57.14%	38.57%	0.00%	45.68%	12.70%	41.62%	0.00%	59.18%	27.89%	12.93%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	105	213	67	0	6	133	85	0	84	25	81	0	41	24	10	0	874
PEAK HR FACTOR :	0.847	0.934	0.798	0.000	0.750	0.853	0.924	0.000	0.808	0.568	0.844	0.000	0.488	0.750	0.500	0.000	0.922
	0.883				0.889				0.896				0.605				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/14/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
4:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	1	1	0	0	0	2	0	0	1	0	0	0	0	1	0	0	6
5:00 PM	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	4
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	8	0	0	0	4	2	0	3	0	2	0	0	1	0	0	21
APPROACH %'s :	11.11%	88.89%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	60.00%	0.00%	40.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	5	0	0	0	3	2	0	1	0	1	0	0	1	0	0	14
PEAK HR FACTOR :	0.250	0.625	0.000	0.000	0.000	0.375	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.583
	0.750				0.625				0.500				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	0	0	0	1	0	0	1	7	1	0	0	0	0	0	13
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	11.11%	77.78%	11.11%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	1	0	0	1	1	1	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.750
	0.500				0.250				0.750								

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Project ID: 21-070180-003
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		English Colony Way/Rock Springs Rd		English Colony Way/Rock Springs Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	2	1	0	0	0	2	0	0	5
4:45 PM	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	1	0	1	1	2	0	0	7
APPROACH %'s :	66.67%	33.33%	0.00%	100.00%	33.33%	66.67%			
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	2	1	0	1	1	2	0	0	7
PEAK HR FACTOR :	0.250	0.250		0.250	0.250	0.250			0.350
	0.250		0.250		0.375				

Prepared by National Data & Surveying Services

Taylor Rd & Penryn Rd

Peak Hour Turning Movement Count

ID: 21-070180-004
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS		COUNT PERIODS
AM	NONE	AM
NOON	NONE	NOON
PM	04:30 PM - 05:30 PM	PM
		4:00 PM - 06:00 PM

SOUTHBOUND (Taylor Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	162	133	0	401	PM

EASTBOUND (Penryn Rd)

AM	NOON	PM	
0	0	2	⇦
0	0	0	↶ 0
0	0	1	↱ 0
0	0	0	→ 0
0	0	1	↷ 0
AM	NOON	PM	

WESTBOUND (Penryn Rd)

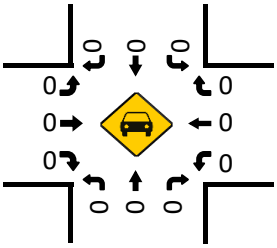
PM	NOON	AM	
184	0	0	↰ 0
1	0	0	← 0
32	0	0	↶ 0
0	0	0	↷ 0
180	0	0	⇨
PM	NOON	AM	

NORTHBOUND (Taylor Rd)

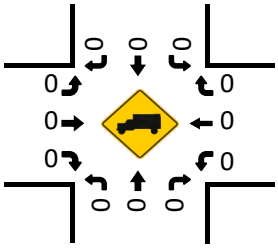
PM	195	0	1	216	47	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
Signalized			
TEV	0 AM	0 NOON	778 PM
PHF			0.90

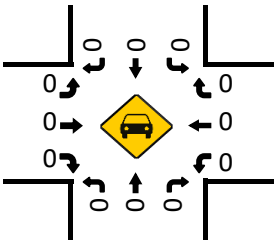
Cars (AM)



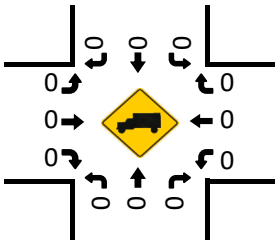
HT (AM)



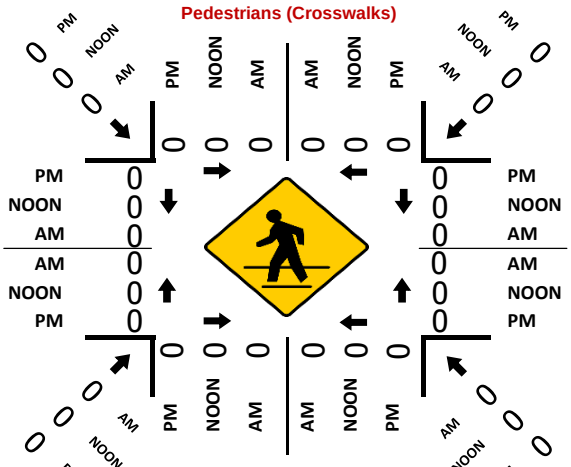
Cars (NOON)



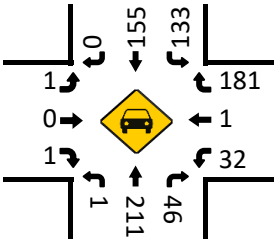
HT (NOON)



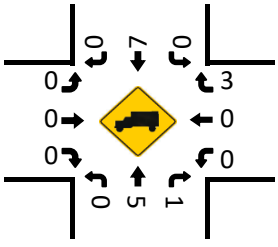
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/14/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	50	16	0	35	23	0	0	0	0	0	0	16	0	43	0	183
4:15 PM	0	48	10	0	28	27	0	0	0	0	0	0	7	0	56	0	176
4:30 PM	0	64	9	0	41	40	0	0	0	0	0	0	8	0	55	0	217
4:45 PM	0	50	8	0	16	39	0	0	1	0	0	0	14	1	44	0	173
5:00 PM	1	54	18	0	37	35	0	0	0	0	1	0	6	0	38	0	190
5:15 PM	0	48	12	0	39	48	0	0	0	0	0	0	4	0	47	0	198
5:30 PM	0	40	11	0	26	34	0	0	0	0	0	0	8	0	41	0	160
5:45 PM	0	46	8	0	21	26	0	0	0	0	0	0	6	0	46	0	153
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	400	92	0	243	272	0	0	1	0	1	0	69	1	370	0	1450
APPROACH %'s :	0.20%	81.14%	18.66%	0.00%	47.18%	52.82%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	15.68%	0.23%	84.09%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	216	47	0	133	162	0	0	1	0	1	0	32	1	184	0	778
PEAK HR FACTOR :	0.250	0.844	0.653	0.000	0.811	0.844	0.000	0.000	0.250	0.000	0.250	0.000	0.571	0.250	0.836	0.000	0.896
	0.904				0.848				0.500				0.861				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	48	16	0	35	22	0	0	0	0	0	0	14	0	42	0	177
4:15 PM	0	48	10	0	28	27	0	0	0	0	0	0	7	0	55	0	175
4:30 PM	0	62	8	0	41	36	0	0	0	0	0	0	8	0	55	0	210
4:45 PM	0	48	8	0	16	38	0	0	1	0	0	0	14	1	43	0	169
5:00 PM	1	53	18	0	37	35	0	0	0	0	1	0	6	0	38	0	189
5:15 PM	0	48	12	0	39	46	0	0	0	0	0	0	4	0	45	0	194
5:30 PM	0	40	11	0	25	33	0	0	0	0	0	0	7	0	39	0	155
5:45 PM	0	46	8	0	21	26	0	0	0	0	0	0	6	0	46	0	153
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	393	91	0	242	263	0	0	1	0	1	0	66	1	363	0	1422
APPROACH %'s :	0.21%	81.03%	18.76%	0.00%	47.92%	52.08%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	15.35%	0.23%	84.42%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	211	46	0	133	155	0	0	1	0	1	0	32	1	181	0	762
PEAK HR FACTOR :	0.250	0.851	0.639	0.000	0.811	0.842	0.000	0.000	0.250	0.000	0.250	0.000	0.571	0.250	0.823	0.000	0.907
	0.896				0.847				0.500				0.849				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/14/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	2	0	1	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	2	1	0	0	4	0	0	0	0	0	0	0	0	0	0	7
4:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	4
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	4
5:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	1	0	2	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	1	0	1	9	0	0	0	0	0	0	3	0	7	0	28
APPROACH %'s :	0.00%	87.50%	12.50%	0.00%	10.00%	90.00%	0.00%	0.00%					30.00%	0.00%	70.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	5	1	0	0	7	0	0	0	0	0	0	0	0	3	0	16
PEAK HR FACTOR :	0.000	0.625	0.250	0.000	0.000	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.571
	0.500				0.438								0.375				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.250				0.500												

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn

Project ID: 21-070180-004
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		Penryn Rd		Penryn Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Penryn Rd & I-80 EB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-005
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS

AM	NONE
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	4:00 PM - 06:00 PM

Penryn Rd

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	81	100	10	0	410	PM

I-80 EB Ramps

EASTBOUND

AM	NOON	PM	
0	0	137	⇦
0	0	0	↶ 0
0	0	201	↱ 0
0	0	15	→ 0
0	0	172	↴ 0
AM	NOON	PM	

CONTROL

2-Way Stop(EB/WB)

TEV	0 AM	0 NOON	854 PM
PHF			0.94

WESTBOUND

PM	NOON	AM	
19	0	0	0 ↰
3	0	0	0 ←
5	0	0	0 ↙
0	0	0	0 ↶
30	0	0	⇨
PM	NOON	AM	

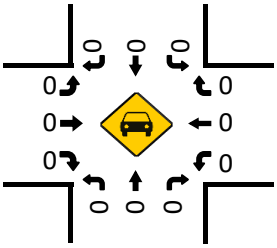
I-80 EB Ramps

PM	277	0	53	190	5	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

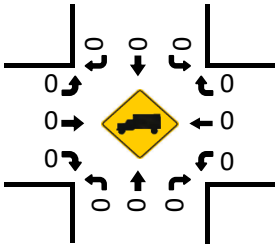
NORTHBOUND

Penryn Rd

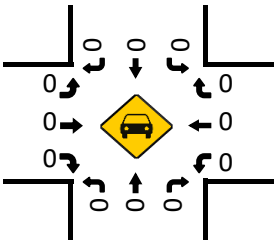
Cars (AM)



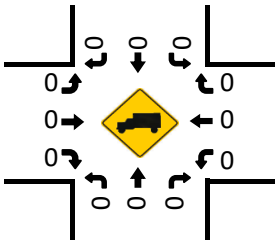
HT (AM)



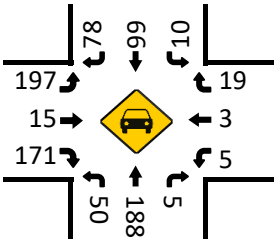
Cars (NOON)



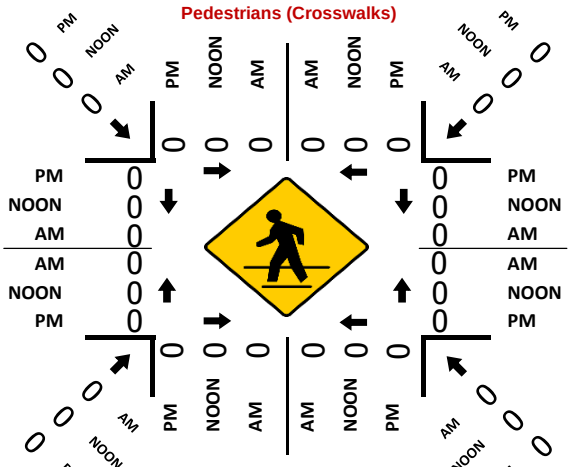
HT (NOON)



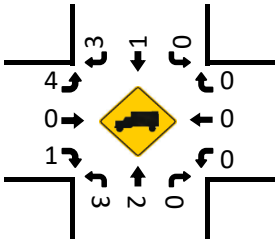
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/14/2021

Data - Total

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	36	1	0	0	15	13	0	49	0	42	0	2	1	1	0	174
4:15 PM	12	34	3	0	1	24	19	0	53	1	32	0	2	1	0	0	182
4:30 PM	11	37	2	0	0	23	14	0	58	5	57	0	0	0	3	0	210
4:45 PM	16	42	1	0	5	21	22	0	57	4	36	0	2	1	6	0	213
5:00 PM	12	51	0	0	3	22	23	0	51	4	46	0	1	0	3	0	216
5:15 PM	8	38	1	0	1	29	20	0	40	6	49	0	1	1	4	0	198
5:30 PM	17	59	3	0	1	28	16	0	53	1	41	0	1	1	6	0	227
5:45 PM	8	42	3	0	1	18	16	0	57	0	48	0	1	0	2	0	196
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	98	339	14	0	12	180	143	0	418	21	351	0	10	5	25	0	1616
APPROACH %'s :	21.73%	75.17%	3.10%	0.00%	3.58%	53.73%	42.69%	0.00%	52.91%	2.66%	44.43%	0.00%	25.00%	12.50%	62.50%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	53	190	5	0	10	100	81	0	201	15	172	0	5	3	19	0	854
PEAK HR FACTOR :	0.779	0.805	0.417	0.000	0.500	0.862	0.880	0.000	0.882	0.625	0.878	0.000	0.625	0.750	0.792	0.000	0.941
	0.785				0.955				0.960				0.750				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	36	1	0	0	15	12	0	49	0	41	0	2	1	1	0	172
4:15 PM	12	34	3	0	1	23	19	0	51	1	32	0	2	1	0	0	179
4:30 PM	11	37	2	0	0	22	14	0	58	4	56	0	0	0	3	0	207
4:45 PM	15	41	1	0	5	21	22	0	56	4	35	0	2	1	6	0	209
5:00 PM	12	51	0	0	3	21	21	0	49	4	46	0	1	0	3	0	211
5:15 PM	7	37	1	0	1	29	19	0	39	6	49	0	1	1	4	0	194
5:30 PM	16	59	3	0	1	28	16	0	53	1	41	0	1	1	6	0	226
5:45 PM	8	42	3	0	1	18	14	0	55	0	48	0	1	0	2	0	192
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	95	337	14	0	12	177	137	0	410	20	348	0	10	5	25	0	1590
APPROACH %'s :	21.30%	75.56%	3.14%	0.00%	3.68%	54.29%	42.02%	0.00%	52.70%	2.57%	44.73%	0.00%	25.00%	12.50%	62.50%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	50	188	5	0	10	99	78	0	197	15	171	0	5	3	19	0	840
PEAK HR FACTOR :	0.781	0.797	0.417	0.000	0.500	0.853	0.886	0.000	0.879	0.625	0.872	0.000	0.625	0.750	0.792	0.000	0.929
	0.779				0.954				0.967				0.750				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/14/2021

Data - HT

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	3
4:45 PM	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	1	2	0	2	0	0	0	0	0	0	0	5
5:15 PM	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	2	0	0	0	3	6	0	8	1	3	0	0	0	0	0	26
APPROACH %'s :	60.00%	40.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	66.67%	8.33%	25.00%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	3	2	0	0	0	1	3	0	4	0	1	0	0	0	0	0	14
PEAK HR FACTOR :	0.750	0.500	0.000	0.000	0.000	0.250	0.375	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.700
	0.625				0.333				0.625								

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	3
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750
					0.250				0.250				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn

Project ID: 21-070180-005
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Penryn Rd		Penryn Rd		I-80 EB Ramps		I-80 EB Ramps		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Penryn Rd & I-80 WB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-006
City: Penryn

Day: Thursday
Date: 10/14/2021

PEAK HOURS	
AM	NONE
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS	
AM	NONE
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Penryn Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	21	60	127	0	245	PM

EASTBOUND (I-80 WB Ramps)

AM	NOON	PM	
0	0	170	⇦
0	0	0	↶ 0
0	0	28	↱ 0
0	0	46	→ 0
0	0	76	↴ 0
AM	NOON	PM	

WESTBOUND (I-80 WB Ramps)

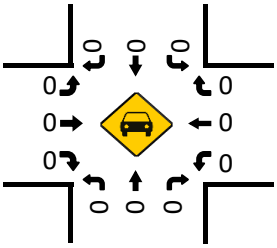
PM	NOON	AM	
29	0	0	↰ 0
79	0	0	← 0
55	0	0	↰ 0
0	0	0	↶ 0
327	0	0	⇨
PM	NOON	AM	

NORTHBOUND (Penryn Rd)

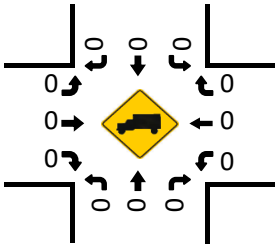
PM	191	0	70	188	154	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
Signalized			
TEV	0 AM	0 NOON	933 PM
PHF			0.94

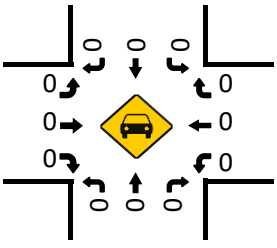
Cars (AM)



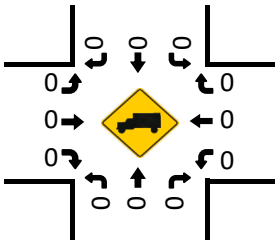
HT (AM)



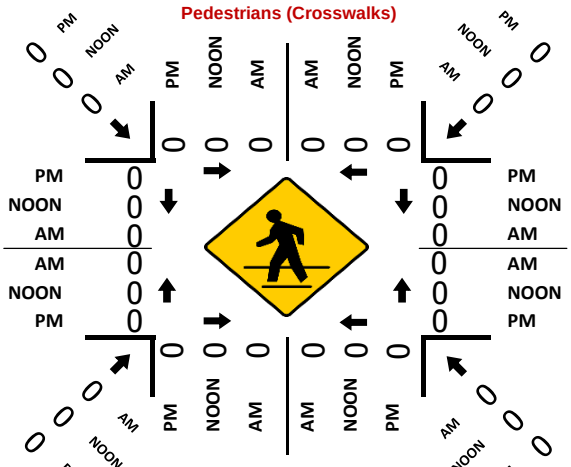
Cars (NOON)



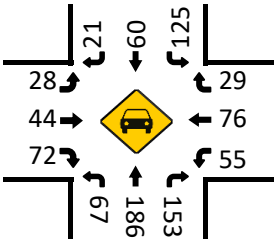
HT (NOON)



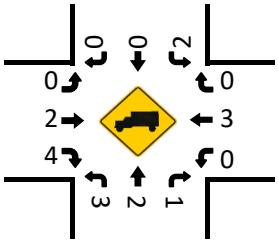
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/14/2021

Data - Total

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	46	23	0	24	9	4	0	7	12	6	0	12	18	8	0	183
4:15 PM	24	46	17	0	44	15	3	0	6	19	21	0	10	10	10	0	225
4:30 PM	18	59	22	0	34	13	7	0	5	13	11	0	11	12	5	0	210
4:45 PM	27	52	28	0	32	12	8	0	8	15	24	0	14	21	8	0	249
5:00 PM	17	46	42	0	32	18	4	0	8	9	19	0	9	14	10	0	228
5:15 PM	11	34	35	0	32	20	3	0	4	10	15	0	18	26	6	0	214
5:30 PM	15	56	49	0	31	10	6	0	8	12	18	0	14	18	5	0	242
5:45 PM	16	55	30	0	30	9	8	0	4	10	15	0	13	13	9	0	212
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	142	394	246	0	259	106	43	0	50	100	129	0	101	132	61	0	1763
APPROACH %'s :	18.16%	50.38%	31.46%	0.00%	63.48%	25.98%	10.54%	0.00%	17.92%	35.84%	46.24%	0.00%	34.35%	44.90%	20.75%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	70	188	154	0	127	60	21	0	28	46	76	0	55	79	29	0	933
PEAK HR FACTOR :	0.648	0.839	0.786	0.000	0.992	0.750	0.656	0.000	0.875	0.767	0.792	0.000	0.764	0.760	0.725	0.000	0.937
	0.858				0.945				0.798				0.815				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	46	23	0	24	9	4	0	7	12	5	0	12	18	6	0	180
4:15 PM	22	46	17	0	43	15	3	0	6	16	21	0	9	7	10	0	215
4:30 PM	18	59	22	0	34	13	7	0	5	13	11	0	10	12	4	0	208
4:45 PM	26	51	28	0	31	12	8	0	8	15	24	0	14	20	8	0	245
5:00 PM	15	46	42	0	31	18	4	0	8	9	16	0	9	14	10	0	222
5:15 PM	11	33	34	0	32	20	3	0	4	9	14	0	18	24	6	0	208
5:30 PM	15	56	49	0	31	10	6	0	8	11	18	0	14	18	5	0	241
5:45 PM	16	53	30	0	30	9	8	0	4	9	14	0	11	13	8	0	205
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	137	390	245	0	256	106	43	0	50	94	123	0	97	126	57	0	1724
APPROACH %'s :	17.75%	50.52%	31.74%	0.00%	63.21%	26.17%	10.62%	0.00%	18.73%	35.21%	46.07%	0.00%	34.64%	45.00%	20.36%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	67	186	153	0	125	60	21	0	28	44	72	0	55	76	29	0	916
PEAK HR FACTOR :	0.644	0.830	0.781	0.000	0.977	0.750	0.656	0.000	0.875	0.733	0.750	0.000	0.764	0.792	0.725	0.000	0.935
	0.846				0.936				0.766				0.833				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/14/2021

Data - HT

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
4:15 PM	2	0	0	0	1	0	0	0	0	3	0	0	1	3	0	0	10
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
4:45 PM	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	4
5:00 PM	2	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	6
5:15 PM	0	1	1	0	0	0	0	0	0	1	1	0	0	2	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0	0	1	1	0	2	0	1	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	4	1	0	3	0	0	0	0	6	6	0	4	6	4	0	39
APPROACH %'s :	50.00%	40.00%	10.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	28.57%	42.86%	28.57%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	3	2	1	0	2	0	0	0	0	2	4	0	0	3	0	0	17
PEAK HR FACTOR :	0.375	0.500	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.333	0.000	0.000	0.375	0.000	0.000	0.708
	0.750				0.500				0.500				0.375				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.250												

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn

Project ID: 21-070180-006
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Penryn Rd		Penryn Rd		I-80 WB Ramps		I-80 WB Ramps		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	1
APPROACH %'s :	100.00%	0.00%							
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Newcastle Rd & I-80 EB Ramps/Indian Hill Rd

Peak Hour Turning Movement Count

ID: 21-070180-007
City: Newcastle

Day: Thursday
Date: 10/14/2021

PEAK HOURS		COUNT PERIODS
AM	NONE	AM
NOON	NONE	NOON
PM	04:30 PM - 05:30 PM	PM
		4:00 PM - 06:00 PM

Newcastle Rd

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	64	112	97	0	390	PM

EASTBOUND (I-80 EB Ramps/Indian Hill Rd)

AM	NOON	PM	
0	0	153	⇦
0	0	0	↶ 0
0	0	107	↱ 0
0	0	213	→ 0
0	0	45	↴ 0
AM	NOON	PM	

WESTBOUND (I-80 EB Ramps/Indian Hill Rd)

PM	NOON	AM	
203	0	0	0 ↰
17	0	0	0 ←
11	0	0	0 ↙
0	0	0	0 ↶
319	0	0	⇨
PM	NOON	AM	

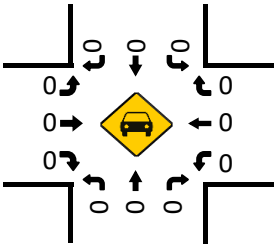
CONTROL			
Signalized			
TEV	0 AM	0 NOON	1030 PM
PHF			0.90

PM	168	0	72	80	9	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

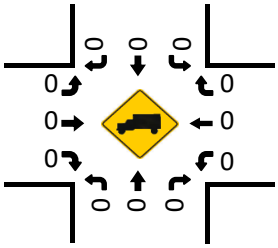
NORTHBOUND

Newcastle Rd

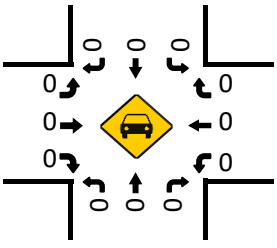
Cars (AM)



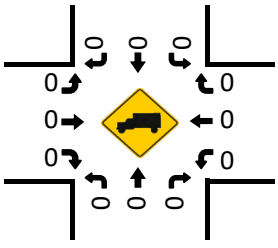
HT (AM)



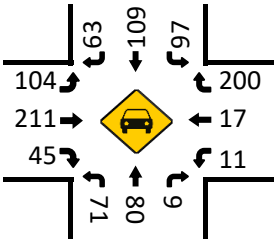
Cars (NOON)



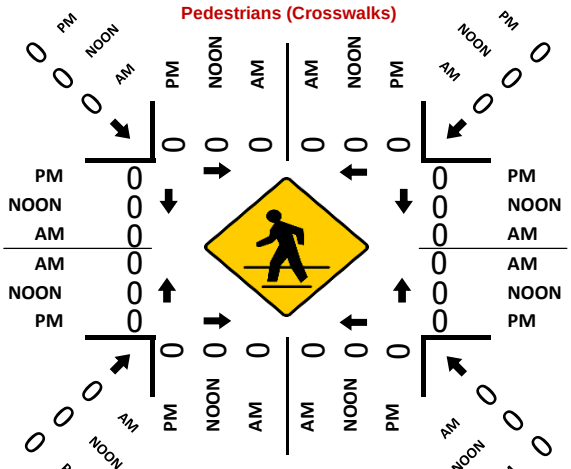
HT (NOON)



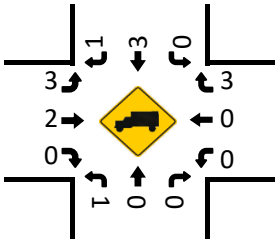
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/14/2021

Data - Total

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	21	29	4	0	30	29	16	0	23	41	15	0	2	3	44	0	257
4:15 PM	22	20	4	0	18	29	9	0	29	49	14	0	3	6	45	0	248
4:30 PM	23	16	5	0	15	22	20	0	21	39	15	0	3	3	51	0	233
4:45 PM	17	27	2	0	25	30	17	0	38	63	8	0	3	6	49	0	285
5:00 PM	14	17	0	0	25	27	14	0	27	53	18	0	3	1	56	0	255
5:15 PM	18	20	2	0	32	33	13	0	21	58	4	0	2	7	47	0	257
5:30 PM	8	15	4	0	22	28	9	0	26	47	3	0	1	5	49	0	217
5:45 PM	11	18	2	0	19	18	6	0	29	43	15	0	1	6	43	0	211
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	134	162	23	0	186	216	104	0	214	393	92	0	18	37	384	0	1963
APPROACH %'s :	42.01%	50.78%	7.21%	0.00%	36.76%	42.69%	20.55%	0.00%	30.62%	56.22%	13.16%	0.00%	4.10%	8.43%	87.47%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	72	80	9	0	97	112	64	0	107	213	45	0	11	17	203	0	1030
PEAK HR FACTOR :	0.783	0.741	0.450	0.000	0.758	0.848	0.800	0.000	0.704	0.845	0.625	0.000	0.917	0.607	0.906	0.000	0.904
	0.875				0.875				0.837				0.963				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	21	29	4	0	28	29	16	0	21	41	14	0	2	3	44	0	252
4:15 PM	22	20	4	0	18	29	9	0	29	49	14	0	3	4	44	0	245
4:30 PM	22	16	5	0	15	22	19	0	19	38	15	0	3	3	50	0	227
4:45 PM	17	27	2	0	25	30	17	0	38	62	8	0	3	6	47	0	282
5:00 PM	14	17	0	0	25	26	14	0	27	53	18	0	3	1	56	0	254
5:15 PM	18	20	2	0	32	31	13	0	20	58	4	0	2	7	47	0	254
5:30 PM	8	15	4	0	22	28	9	0	26	47	3	0	1	5	46	0	214
5:45 PM	11	18	2	0	19	18	6	0	29	42	15	0	1	6	43	0	210
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	133	162	23	0	184	213	103	0	209	390	91	0	18	35	377	0	1938
APPROACH %'s :	41.82%	50.94%	7.23%	0.00%	36.80%	42.60%	20.60%	0.00%	30.29%	56.52%	13.19%	0.00%	4.19%	8.14%	87.67%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	71	80	9	0	97	109	63	0	104	211	45	0	11	17	200	0	1017
PEAK HR FACTOR :	0.807	0.741	0.450	0.000	0.758	0.879	0.829	0.000	0.684	0.851	0.625	0.000	0.917	0.607	0.893	0.000	0.902
	0.870				0.885				0.833				0.950				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/14/2021

Data - HT

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
4:30 PM	1	0	0	0	0	0	1	0	2	1	0	0	0	0	1	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	2	3	1	0	5	3	1	0	0	2	7	0	25
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	33.33%	50.00%	16.67%	0.00%	55.56%	33.33%	11.11%	0.00%	0.00%	22.22%	77.78%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	3	1	0	3	2	0	0	0	0	3	0	13
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.375	0.500	0.000	0.000	0.000	0.000	0.375	0.000	0.542
	0.250				0.500				0.417				0.375				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	4	1	0	0	0	0	0	0	0	0	1	0	6
APPROACH %'s :					80.00%	20.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
					0.375												

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Project ID: 21-070180-007
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Newcastle Rd		Newcastle Rd		I-80 EB Ramps/Indian Hill Rd		I-80 EB Ramps/Indian Hill Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

I-80 WB Ramps & Newcastle Rd

Peak Hour Turning Movement Count

ID: 21-070180-008
City: Newcastle

Day: Thursday
Date: 10/14/2021

PEAK HOURS	SOUTHBOUND (I-80 WB Ramps)	COUNT PERIODS
NONE	AM	NONE
NONE	NOON	NONE
04:00 PM - 05:00 PM	PM	4:00 PM - 06:00 PM

SOUTHBOUND	Left	Thru	Right	U-Turn
AM	0	0	0	0
NOON	0	0	0	0
PM	42	0	102	0

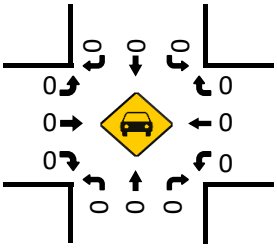
EASTBOUND (Newcastle Rd)	AM	NOON	PM
U-Turn	0	0	0
Left	0	0	0
Thru	0	0	170
Right	0	0	90
Entering	0	0	256

WESTBOUND (Newcastle Rd)	AM	NOON	PM
U-Turn	0	0	0
Left	0	0	0
Thru	0	0	172
Right	0	0	214
Entering	0	0	272

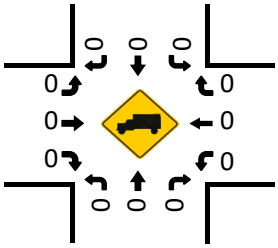
NORTHBOUND (I-80 WB Ramps)	Left	Thru	Right	U-Turn
AM	0	0	0	0
NOON	0	0	0	0
PM	262	0	0	0

CONTROL	AM	NOON	PM
1-Way Stop(SB)			
TEV	0	0	790
PHF			0.95

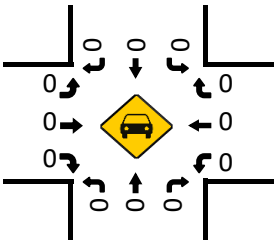
Cars (AM)



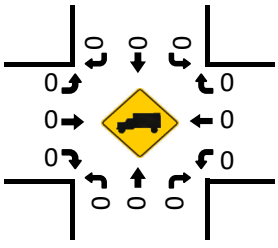
HT (AM)



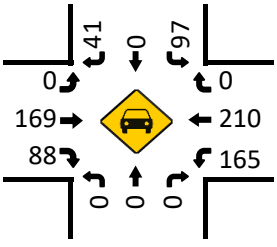
Cars (NOON)



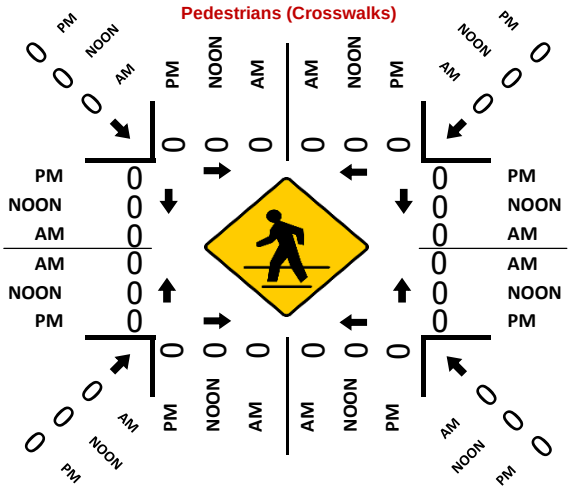
HT (NOON)



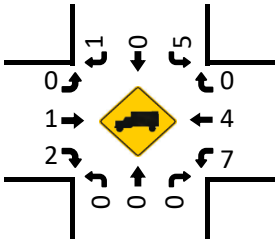
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/14/2021

Data - Total

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	40	0	4	0	0	40	24	0	48	52	0	0	208
4:15 PM	0	0	0	0	21	0	17	0	0	37	31	0	41	52	0	0	199
4:30 PM	0	0	0	0	17	0	13	0	0	49	17	0	41	43	0	0	180
4:45 PM	0	0	0	0	24	0	8	0	0	44	18	0	42	67	0	0	203
5:00 PM	0	0	0	0	17	0	8	0	0	49	21	0	54	49	0	0	198
5:15 PM	0	0	0	0	32	0	12	0	0	44	28	0	49	36	0	0	201
5:30 PM	0	0	0	0	27	0	9	0	0	31	15	0	31	56	0	0	169
5:45 PM	0	0	0	0	16	0	15	0	0	24	16	0	38	57	0	0	166
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	194	0	86	0	0	318	170	0	344	412	0	0	1524
APPROACH %'s :					69.29%	0.00%	30.71%	0.00%	0.00%	65.16%	34.84%	0.00%	45.50%	54.50%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	102	0	42	0	0	170	90	0	172	214	0	0	790
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.638	0.000	0.618	0.000	0.000	0.867	0.726	0.000	0.896	0.799	0.000	0.000	0.950
					0.818				0.956				0.885				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/14/2021

Data - Cars

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	35	0	4	0	0	40	24	0	47	50	0	0	200
4:15 PM	0	0	0	0	21	0	16	0	0	37	31	0	38	51	0	0	194
4:30 PM	0	0	0	0	17	0	13	0	0	48	15	0	40	42	0	0	175
4:45 PM	0	0	0	0	24	0	8	0	0	44	18	0	40	67	0	0	201
5:00 PM	0	0	0	0	16	0	8	0	0	49	20	0	54	49	0	0	196
5:15 PM	0	0	0	0	31	0	12	0	0	43	27	0	47	36	0	0	196
5:30 PM	0	0	0	0	27	0	9	0	0	31	15	0	29	55	0	0	166
5:45 PM	0	0	0	0	16	0	15	0	0	24	16	0	38	57	0	0	166
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	187	0	85	0	0	316	166	0	333	407	0	0	1494
APPROACH %'s :					68.75%	0.00%	31.25%	0.00%	0.00%	65.56%	34.44%	0.00%	45.00%	55.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	97	0	41	0	0	169	88	0	165	210	0	0	770
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.693	0.000	0.641	0.000	0.000	0.880	0.710	0.000	0.878	0.784	0.000	0.000	0.958
						0.885				0.945				0.876			

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/14/2021

Data - HT

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	5	0	0	0	0	0	0	0	1	2	0	0	8
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	3	1	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	1	1	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	1	1	0	2	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	1	0	0	2	4	0	11	5	0	0	30
APPROACH %'s :					87.50%	0.00%	12.50%	0.00%	0.00%	33.33%	66.67%	0.00%	68.75%	31.25%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	1	0	0	1	2	0	7	4	0	0	20
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.583	0.500	0.000	0.000	0.625
					0.300				0.250				0.688				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	6
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500
									0.250				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle

Project ID: 21-070180-008
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	I-80 WB Ramps		I-80 WB Ramps		Newcastle Rd		Newcastle Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Ophir Rd & Taylor Rd/I-80 WB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-009
City: Newcastle

Day: Thursday
Date: 10/14/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Ophir Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	118	19	82	0	273	PM

EASTBOUND (Taylor Rd/I-80 WB Ramps)

AM	NOON	PM	
0	0	431	⇦
0	0	0	↶ 0
0	0	136	↱ 0
0	0	23	→ 0
0	0	361	↷ 0
AM	NOON	PM	

WESTBOUND (Taylor Rd/I-80 WB Ramps)

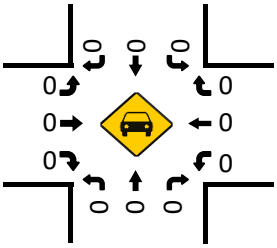
PM	NOON	AM	
15	0	0	↰ 0
275	0	0	← 0
9	0	0	↰ 0
0	0	0	↶ 0
122	0	0	⇨
PM	NOON	AM	

NORTHBOUND (Ophir Rd)

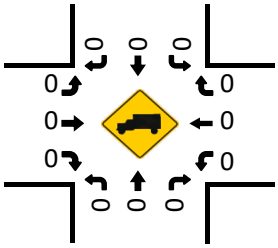
PM	389	0	38	122	17	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
4-Way Stop			
TEV	0 AM	0 NOON	1215 PM
PHF			0.91

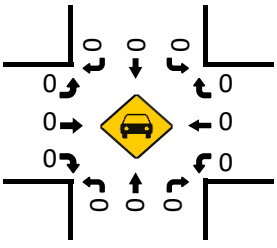
Cars (AM)



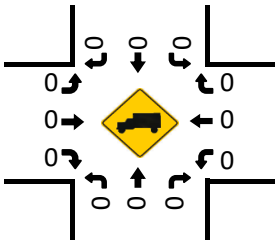
HT (AM)



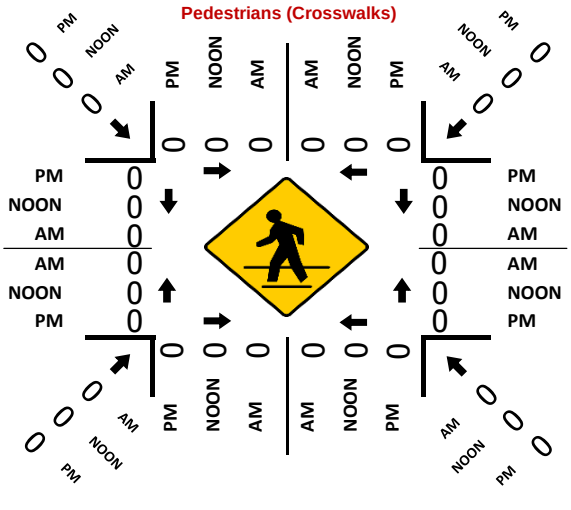
Cars (NOON)



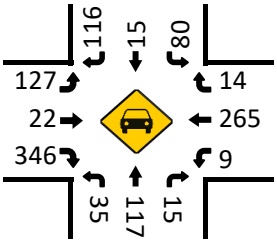
HT (NOON)



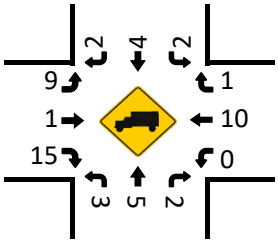
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/14/2021

Data - Total

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	35	7	0	29	2	31	0	26	4	77	0	2	73	5	0	299
4:15 PM	11	34	4	0	20	5	25	0	42	8	96	0	3	78	6	0	332
4:30 PM	7	25	1	0	20	5	31	0	36	8	103	0	3	67	2	0	308
4:45 PM	12	28	5	0	13	7	31	0	32	3	85	0	1	57	2	0	276
5:00 PM	12	24	3	0	22	6	24	0	22	7	63	0	2	84	1	0	270
5:15 PM	4	28	7	0	31	1	20	0	27	10	93	0	0	65	3	0	289
5:30 PM	5	28	1	0	18	2	18	0	21	4	95	0	3	63	3	0	261
5:45 PM	7	26	2	0	27	4	18	0	18	7	60	0	1	61	2	0	233
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	66	228	30	0	180	32	198	0	224	51	672	0	15	548	24	0	2268
APPROACH %'s :	20.37%	70.37%	9.26%	0.00%	43.90%	7.80%	48.29%	0.00%	23.65%	5.39%	70.96%	0.00%	2.56%	93.36%	4.09%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	38	122	17	0	82	19	118	0	136	23	361	0	9	275	15	0	1215
PEAK HR FACTOR :	0.792	0.871	0.607	0.000	0.707	0.679	0.952	0.000	0.810	0.719	0.876	0.000	0.750	0.881	0.625	0.000	0.915
	0.885				0.883				0.884				0.859				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	34	6	0	28	2	31	0	25	3	76	0	2	69	5	0	289
4:15 PM	9	32	3	0	19	3	25	0	40	8	91	0	3	74	5	0	312
4:30 PM	6	24	1	0	20	5	29	0	32	8	100	0	3	66	2	0	296
4:45 PM	12	27	5	0	13	5	31	0	30	3	79	0	1	56	2	0	264
5:00 PM	12	24	2	0	22	6	24	0	21	6	62	0	1	81	1	0	262
5:15 PM	3	27	6	0	31	1	19	0	25	10	93	0	0	64	2	0	281
5:30 PM	5	28	1	0	17	1	18	0	20	3	92	0	3	62	2	0	252
5:45 PM	7	26	2	0	26	3	18	0	16	7	60	0	1	61	1	0	228
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	62	222	26	0	176	26	195	0	209	48	653	0	14	533	20	0	2184
APPROACH %'s :	20.00%	71.61%	8.39%	0.00%	44.33%	6.55%	49.12%	0.00%	22.97%	5.27%	71.76%	0.00%	2.47%	94.00%	3.53%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	35	117	15	0	80	15	116	0	127	22	346	0	9	265	14	0	1161
PEAK HR FACTOR :	0.729	0.860	0.625	0.000	0.714	0.750	0.935	0.000	0.794	0.688	0.865	0.000	0.750	0.895	0.700	0.000	0.930
	0.870				0.865				0.884				0.878				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/14/2021

Data - HT

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	1	0	1	0	0	0	1	1	1	0	0	4	0	0	10
4:15 PM	2	2	1	0	1	2	0	0	2	0	5	0	0	4	1	0	20
4:30 PM	1	1	0	0	0	0	2	0	4	0	3	0	0	1	0	0	12
4:45 PM	0	1	0	0	0	2	0	0	2	0	6	0	0	1	0	0	12
5:00 PM	0	0	1	0	0	0	0	0	1	1	1	0	1	3	0	0	8
5:15 PM	1	1	1	0	0	0	1	0	2	0	0	0	0	1	1	0	8
5:30 PM	0	0	0	0	1	1	0	0	1	1	3	0	0	1	1	0	9
5:45 PM	0	0	0	0	1	1	0	0	2	0	0	0	0	0	1	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	6	4	0	4	6	3	0	15	3	19	0	1	15	4	0	84
APPROACH %'s :	28.57%	42.86%	28.57%	0.00%	30.77%	46.15%	23.08%	0.00%	40.54%	8.11%	51.35%	0.00%	5.00%	75.00%	20.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	3	5	2	0	2	4	2	0	9	1	15	0	0	10	1	0	54
PEAK HR FACTOR :	0.375	0.625	0.500	0.000	0.500	0.500	0.250	0.000	0.563	0.250	0.625	0.000	0.000	0.625	0.250	0.000	0.675
	0.500				0.667				0.781				0.550				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	5	0	2	0	0	0	0	0	0	0	7
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
					0.500				0.250								

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle

Project ID: 21-070180-009
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Ophir Rd		Ophir Rd		Taylor Rd/I-80 WB Ramps		Taylor Rd/I-80 WB Ramps		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193

Peak Hour Turning Movement Count

ID: 21-070180-010
City: Newcastle

Day: Thursday
Date: 10/14/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Hillview Rd/I-80 EB Ramps

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	162	5	0	0	0	PM

EASTBOUND — Ophir Rd/SR 193

AM	NOON	PM	
0	0	177	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	372	→ 0
0	0	11	↷ 0

WESTBOUND — Ophir Rd/SR 193

	PM	NOON	AM
0 ↰	0	0	0
0 ←	0	0	0
0 ↶	0	0	0
0 ↷	0	0	0
⇨	384	0	0

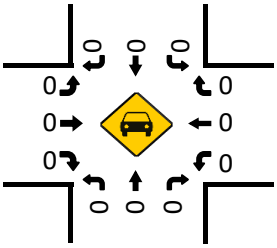
CONTROL
2-Way Stop(NB/SB)

	AM	NOON	PM
TEV	0	0	577
PHF			0.93

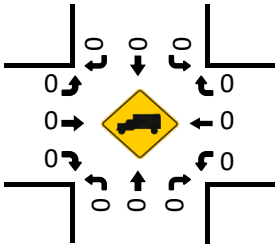
NORTHBOUND — Hillview Rd/I-80 EB Ramps

PM	16	0	15	0	12	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

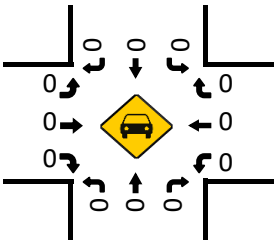
Cars (AM)



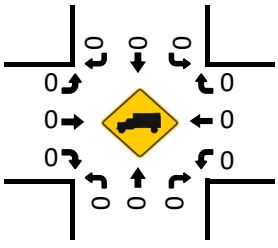
HT (AM)



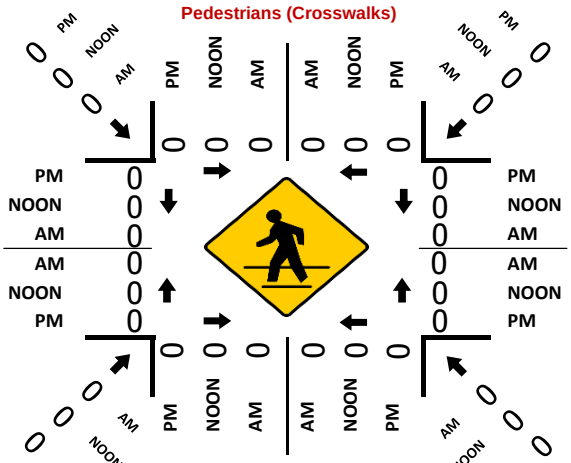
Cars (NOON)



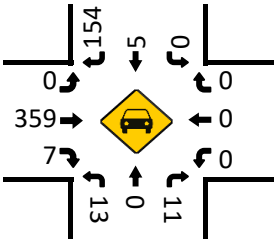
HT (NOON)



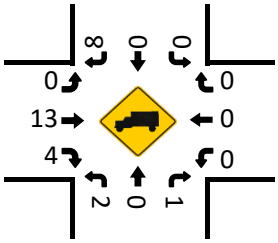
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/14/2021

Data - Total

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	0	4	0	0	0	45	0	0	78	1	0	0	0	0	0	134
4:15 PM	3	0	1	0	0	1	45	0	0	101	4	0	0	0	0	0	155
4:30 PM	2	0	2	0	0	3	35	0	0	109	3	0	0	0	0	0	154
4:45 PM	4	0	5	0	0	1	37	0	0	84	3	0	0	0	0	0	134
5:00 PM	6	0	6	0	0	2	33	0	0	75	2	0	0	0	0	0	124
5:15 PM	8	0	2	0	1	5	32	0	0	94	0	0	0	0	0	0	142
5:30 PM	1	0	1	0	0	4	32	0	0	93	5	0	0	0	0	0	136
5:45 PM	3	0	3	0	0	0	33	0	0	66	1	0	0	0	0	0	106
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	33	0	24	0	1	16	292	0	0	700	19	0	0	0	0	0	1085
APPROACH %'s :	57.89%	0.00%	42.11%	0.00%	0.32%	5.18%	94.50%	0.00%	0.00%	97.36%	2.64%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	15	0	12	0	0	5	162	0	0	372	11	0	0	0	0	0	577
PEAK HR FACTOR :	0.625	0.000	0.600	0.000	0.000	0.417	0.900	0.000	0.000	0.853	0.688	0.000	0.000	0.000	0.000	0.000	0.931
	0.675				0.908				0.855								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/14/2021

Data - Cars

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	0	3	0	0	0	44	0	0	77	1	0	0	0	0	0	130
4:15 PM	2	0	1	0	0	1	41	0	0	97	2	0	0	0	0	0	144
4:30 PM	2	0	2	0	0	3	32	0	0	106	2	0	0	0	0	0	147
4:45 PM	4	0	5	0	0	1	37	0	0	79	2	0	0	0	0	0	128
5:00 PM	5	0	6	0	0	2	33	0	0	72	1	0	0	0	0	0	119
5:15 PM	7	0	2	0	1	4	30	0	0	94	0	0	0	0	0	0	138
5:30 PM	1	0	1	0	0	3	32	0	0	90	5	0	0	0	0	0	132
5:45 PM	3	0	3	0	0	0	32	0	0	64	1	0	0	0	0	0	103
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	0	23	0	1	14	281	0	0	679	14	0	0	0	0	0	1041
APPROACH %'s :	55.77%	0.00%	44.23%	0.00%	0.34%	4.73%	94.93%	0.00%	0.00%	97.98%	2.02%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	13	0	11	0	0	5	154	0	0	359	7	0	0	0	0	0	549
PEAK HR FACTOR :	0.650	0.000	0.550	0.000	0.000	0.417	0.875	0.000	0.000	0.847	0.875	0.000	0.000	0.000	0.000	0.000	0.934
	0.667				0.903				0.847								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/14/2021

Data - HT

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	4
4:15 PM	1	0	0	0	0	0	4	0	0	4	2	0	0	0	0	0	11
4:30 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
5:00 PM	1	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	5
5:15 PM	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	0	1	0	0	2	11	0	0	21	5	0	0	0	0	0	44
APPROACH %'s :	80.00%	0.00%	20.00%	0.00%	0.00%	15.38%	84.62%	0.00%	0.00%	80.77%	19.23%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	8	0	0	13	4	0	0	0	0	0	28
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.650	0.500	0.000	0.000	0.000	0.000	0.000	0.636
	0.375				0.500				0.708								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/14/2021

Data - Bikes

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle

Project ID: 21-070180-010
Date: 10/14/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Hillview Rd/I-80 EB Ramps		Hillview Rd/I-80 EB Ramps		Ophir Rd/SR 193		Ophir Rd/SR 193		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR 193 & Taylor Rd/SR 193

Peak Hour Turning Movement Count

ID: 22-070051-001
City: Newcastle

Day: Tuesday
Date: 3/22/2022

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SR 193

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	1	2	5	0	4	PM

EASTBOUND

AM	NOON	PM	
0	0	161	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	188	→ 0
0	0	19	↴ 0
AM	NOON	PM	

WESTBOUND

PM	NOON	AM	
2	0	0	↰ 0
154	0	0	← 0
265	0	0	↰ 0
0	0	0	↶ 0
413	0	0	⇨
PM	NOON	AM	

CONTROL
4-Way Stop

TEV	0 AM	0 NOON	864 PM
PHF			0.93

NORTHBOUND

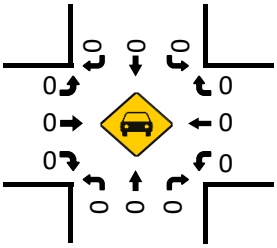
PM	286	0	6	2	220	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

SR 193

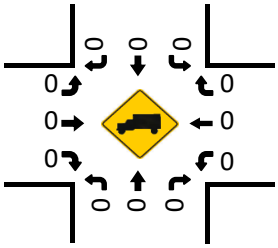
Taylor Rd/SR 193

Taylor Rd/SR 193

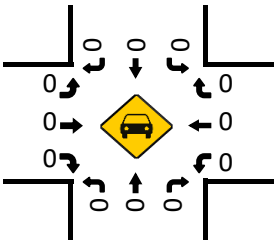
Cars (AM)



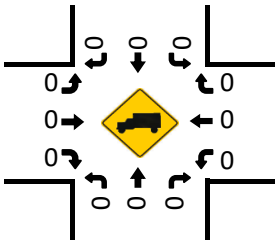
HT (AM)



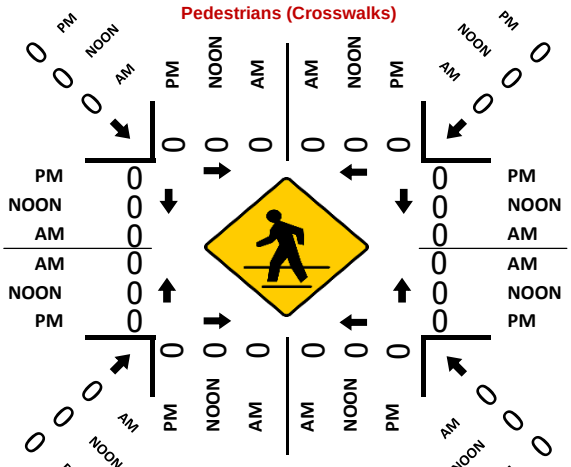
Cars (NOON)



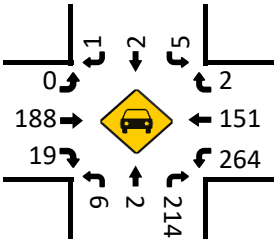
HT (NOON)



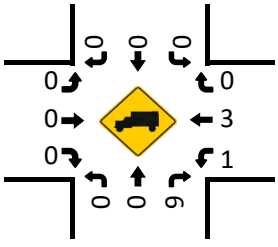
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/22/2022

Data - Total

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	1	53	0	2	1	0	0	0	63	5	0	65	31	0	0	228
4:15 PM	3	0	67	0	0	1	0	0	0	55	2	1	42	32	0	0	203
4:30 PM	0	0	45	0	2	1	0	0	0	59	8	0	79	38	0	0	232
4:45 PM	2	1	53	0	2	1	0	0	0	36	1	0	57	40	1	0	194
5:00 PM	3	0	55	0	1	0	0	0	0	50	4	0	62	39	1	0	215
5:15 PM	1	1	67	0	0	0	1	0	0	43	6	0	67	37	0	0	223
5:30 PM	2	0	41	0	0	0	1	0	0	48	1	0	47	27	0	0	167
5:45 PM	1	0	42	0	0	0	0	0	0	39	2	0	41	28	0	0	153
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	3	423	0	7	4	2	0	0	393	29	1	460	272	2	0	1615
APPROACH %'s :	4.27%	0.67%	95.06%	0.00%	53.85%	30.77%	15.38%	0.00%	0.00%	92.91%	6.86%	0.24%	62.67%	37.06%	0.27%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	6	2	220	0	5	2	1	0	0	188	19	0	265	154	2	0	864
PEAK HR FACTOR :	0.500	0.500	0.821	0.000	0.625	0.500	0.250	0.000	0.000	0.797	0.594	0.000	0.839	0.963	0.500	0.000	0.931
	0.826				0.667				0.772				0.900				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/22/2022

Data - Cars

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	1	51	0	2	1	0	0	0	63	5	0	64	31	0	0	225
4:15 PM	3	0	66	0	0	1	0	0	0	54	2	1	42	32	0	0	201
4:30 PM	0	0	44	0	2	1	0	0	0	59	8	0	79	37	0	0	230
4:45 PM	2	1	52	0	2	1	0	0	0	36	1	0	57	39	1	0	192
5:00 PM	3	0	53	0	1	0	0	0	0	50	4	0	62	38	1	0	212
5:15 PM	1	1	65	0	0	0	1	0	0	43	6	0	66	37	0	0	220
5:30 PM	2	0	41	0	0	0	1	0	0	48	1	0	47	27	0	0	167
5:45 PM	1	0	42	0	0	0	0	0	0	39	2	0	41	28	0	0	153
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	3	414	0	7	4	2	0	0	392	29	1	458	269	2	0	1600
APPROACH %'s :	4.36%	0.69%	94.95%	0.00%	53.85%	30.77%	15.38%	0.00%	0.00%	92.89%	6.87%	0.24%	62.83%	36.90%	0.27%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	6	2	214	0	5	2	1	0	0	188	19	0	264	151	2	0	854
PEAK HR FACTOR :	0.500	0.500	0.823	0.000	0.625	0.500	0.250	0.000	0.000	0.797	0.594	0.000	0.835	0.968	0.500	0.000	0.928
	0.828				0.667				0.772				0.899				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/22/2022

Data - HT

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3
4:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3
5:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	9	0	0	0	0	0	0	1	0	0	2	3	0	0	15
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	40.00%	60.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	6	0	0	0	0	0	0	0	0	0	1	3	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.750	0.000	0.000	0.833
	0.750												1.000				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/22/2022

Data - Bikes

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	0	0	2	2	0	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%									50.00%	50.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
	0.250												0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193 **Project ID:** 22-070051-001
City: Newcastle **Date:** 3/22/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 193		SR 193		Taylor Rd/SR 193		Taylor Rd/SR 193		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	1	0	0	0	0	2
APPROACH %'s :			50.00%	50.00%					
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Taylor Rd & Callison Rd

Peak Hour Turning Movement Count

ID: 21-070180-001
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS

AM	NONE
NOON	12:00 PM - 01:00 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	11:30 AM - 02:00 PM
PM	NONE

SOUTHBOUND (Taylor Rd)

AM	0	0	0	0	0	AM
NOON	10	140	0	0	198	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Callison Rd)

AM	NOON	PM
0	18	0
0	0	0
0	10	0
0	0	0
0	4	0

WESTBOUND (Callison Rd)

PM	NOON	AM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

NORTHBOUND (Taylor Rd)

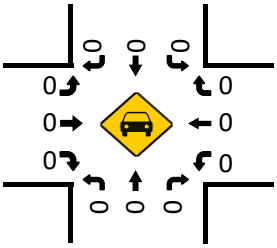
PM	0	0	0	0	0	PM
NOON	144	0	8	188	0	NOON
AM	0	0	0	0	0	AM

CONTROL

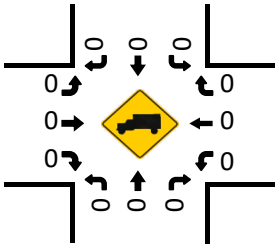
1-Way Stop(EB)

	AM	NOON	PM
TEV	0	360	0
PHF		0.92	

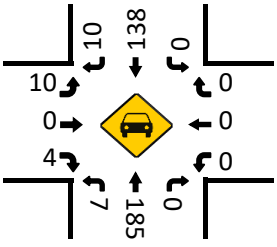
Cars (AM)



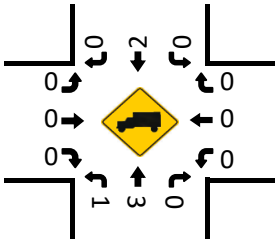
HT (AM)



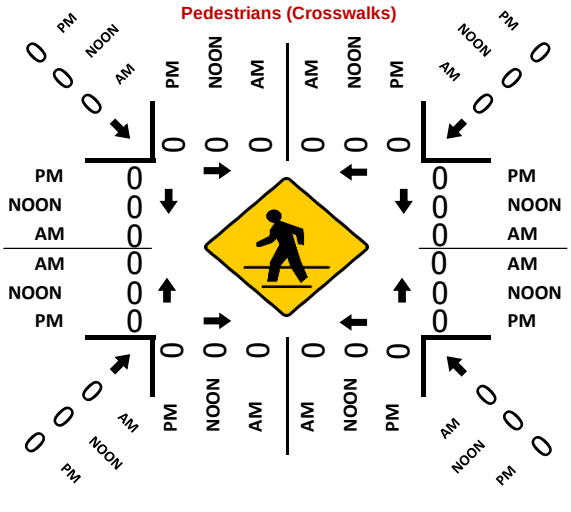
Cars (NOON)



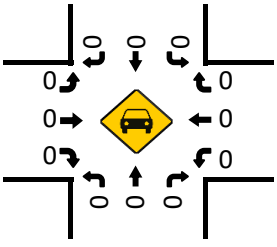
HT (NOON)



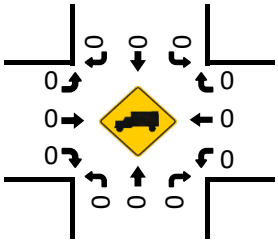
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/16/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	1	47	0	0	0	37	2	0	2	0	2	0	0	0	0	0	91
11:45 AM	2	37	0	0	0	34	2	1	2	0	0	0	0	0	0	0	78
12:00 PM	1	38	0	0	0	49	4	0	4	0	1	0	0	0	0	0	97
12:15 PM	1	46	0	0	0	27	2	0	2	0	0	0	0	0	0	0	78
12:30 PM	2	50	0	0	0	29	3	0	2	0	1	0	0	0	0	0	87
12:45 PM	4	54	0	0	0	35	1	0	2	0	2	0	0	0	0	0	98
1:00 PM	2	42	0	0	0	30	3	0	4	0	1	0	0	0	0	0	82
1:15 PM	5	47	0	0	0	36	1	0	3	0	0	0	0	0	0	0	92
1:30 PM	1	39	0	1	0	32	0	0	2	0	5	0	0	0	0	0	80
1:45 PM	0	49	0	0	0	37	4	0	1	0	2	0	0	0	0	0	93
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	449	0	1	0	346	22	1	24	0	14	0	0	0	0	0	876
APPROACH %'s :	4.05%	95.74%	0.00%	0.21%	0.00%	93.77%	5.96%	0.27%	63.16%	0.00%	36.84%	0.00%					
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	8	188	0	0	0	140	10	0	10	0	4	0	0	0	0	0	360
PEAK HR FACTOR :	0.500	0.870	0.000	0.000	0.000	0.714	0.625	0.000	0.625	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.918
	0.845				0.708				0.700								

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	1	45	0	0	0	37	1	0	2	0	2	0	0	0	0	0	88
11:45 AM	2	36	0	0	0	34	2	1	2	0	0	0	0	0	0	0	77
12:00 PM	1	36	0	0	0	48	4	0	4	0	1	0	0	0	0	0	94
12:15 PM	0	45	0	0	0	27	2	0	2	0	0	0	0	0	0	0	76
12:30 PM	2	50	0	0	0	29	3	0	2	0	1	0	0	0	0	0	87
12:45 PM	4	54	0	0	0	34	1	0	2	0	2	0	0	0	0	0	97
1:00 PM	2	42	0	0	0	30	3	0	3	0	1	0	0	0	0	0	81
1:15 PM	5	46	0	0	0	35	1	0	2	0	0	0	0	0	0	0	89
1:30 PM	1	39	0	1	0	32	0	0	2	0	5	0	0	0	0	0	80
1:45 PM	0	49	0	0	0	36	3	0	1	0	2	0	0	0	0	0	91
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	442	0	1	0	342	20	1	22	0	14	0	0	0	0	0	860
APPROACH %'s :	3.90%	95.88%	0.00%	0.22%	0.00%	94.21%	5.51%	0.28%	61.11%	0.00%	38.89%	0.00%					
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	7	185	0	0	0	138	10	0	10	0	4	0	0	0	0	0	354
PEAK HR FACTOR :	0.438	0.856	0.000	0.000	0.000	0.719	0.625	0.000	0.625	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.912
	0.828				0.712				0.700								

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/16/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	7	0	0	0	4	2	0	2	0	0	0	0	0	0	0	16
APPROACH %'s :	12.50%	87.50%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	1	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.250	0.375	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.500				0.500												

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(EB)

Project ID: 21-070180-001
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	3	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	9
12:00 PM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
12:15 PM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	10	0	0	0	11	0	0	1	0	0	0	0	0	0	0	25
APPROACH %'s :	23.08%	76.92%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	0	5	0	0	0	4	0	0	1	0	0	0	0	0	0	0	10
PEAK HR FACTOR :	0.000	0.625	0.000	0.000	0.000	0.333	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
		0.625				0.333				0.250							

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Callison Rd
City: Penryn

Project ID: 21-070180-001
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		Callison Rd		Callison Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Sisley Rd & Callison Rd

Peak Hour Turning Movement Count

ID: 21-070180-002
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:45 PM - 01:45 PM	11:30 AM - 02:00 PM
NONE	NONE

CONTROL: 1-Way Stop(NB)

	AM	NOON	PM
TEV	0	28	0
PHF		0.88	

SOUTHBOUND (Sisley Rd)

	L	T	R	U	
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	0	0	0	0

EASTBOUND (Callison Rd)

	L	T	R	
AM	0	0	0	0
NOON	0	0	0	0
PM	0	0	0	0
AM	0	10	0	
NOON	0	13	0	
PM	0	0	0	

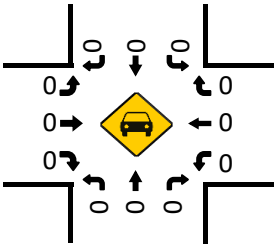
WESTBOUND (Callison Rd)

	L	T	R	
PM	0	0	0	0
NOON	0	8	0	0
AM	0	3	0	0
PM	0	0	0	0
NOON	0	15	0	
AM	0	0	0	

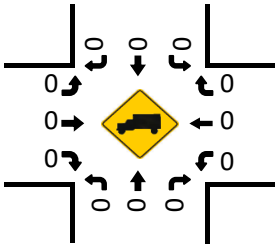
NORTHBOUND (Sisley Rd)

	L	T	T	R	U	
PM	0	0	0	0	0	PM
NOON	3	0	2	0	2	NOON
AM	0	0	0	0	0	AM

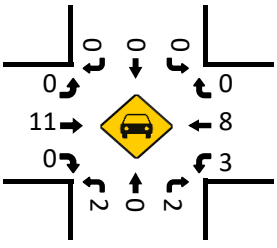
Cars (AM)



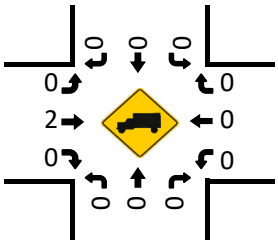
HT (AM)



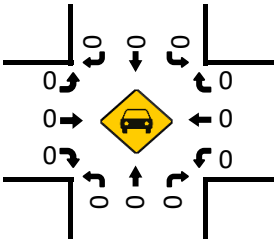
Cars (NOON)



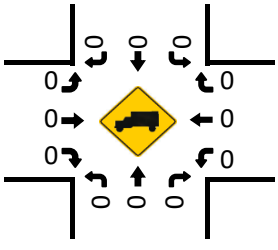
HT (NOON)



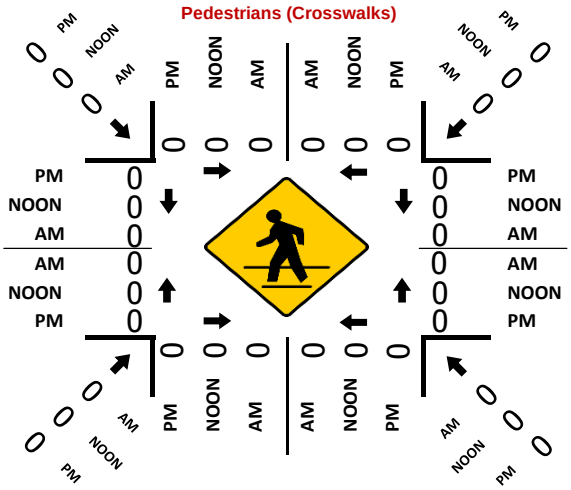
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/16/2021

Data - Total

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
11:45 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	3	0	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
12:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	5
12:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
12:45 PM	1	0	0	0	0	0	0	0	0	4	0	0	1	1	0	0	7
1:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	6
1:15 PM	1	0	1	0	0	0	0	0	0	2	0	0	1	3	0	0	8
1:30 PM	0	0	1	0	0	0	0	0	0	5	0	0	0	1	0	0	7
1:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	3	0	0	0	0	0	0	27	0	0	6	25	0	0	63
APPROACH %'s :	40.00%	0.00%	60.00%	0.00%					0.00%	100.00%	0.00%	0.00%	19.35%	80.65%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	2	0	2	0	0	0	0	0	0	13	0	0	3	8	0	0	28
PEAK HR FACTOR :	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.000	0.000	0.750	0.667	0.000	0.000	0.875
	0.500								0.650				0.688				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
11:45 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	3	0	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
12:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
12:45 PM	1	0	0	0	0	0	0	0	0	4	0	0	1	1	0	0	7
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	5
1:15 PM	1	0	1	0	0	0	0	0	0	1	0	0	1	3	0	0	7
1:30 PM	0	0	1	0	0	0	0	0	0	5	0	0	0	1	0	0	7
1:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	3	0	0	0	0	0	0	25	0	0	4	24	0	0	58
APPROACH %'s :	40.00%	0.00%	60.00%	0.00%					0.00%	100.00%	0.00%	0.00%	14.29%	85.71%	0.00%	0.00%	
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	2	0	2	0	0	0	0	0	0	11	0	0	3	8	0	0	26
PEAK HR FACTOR :	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.750	0.667	0.000	0.000	0.929
	0.500								0.550				0.688				

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/16/2021

Data - HT

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
										0.500							

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn
Control: 1-Way Stop(NB)

Project ID: 21-070180-002
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Sisley Rd				Sisley Rd				Callison Rd				Callison Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Sisley Rd & Callison Rd
City: Penryn

Project ID: 21-070180-002
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Sisley Rd		Sisley Rd		Callison Rd		Callison Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Taylor Rd & English Colony Way/Rock Springs Rd

Peak Hour Turning Movement Count

ID: 21-070180-003
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS

AM	NONE
NOON	12:00 PM - 01:00 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	11:30 AM - 02:00 PM
PM	NONE

SOUTHBOUND (Taylor Rd)

AM	0	0	0	0	0	AM
NOON	62	105	6	0	217	NOON
PM	0	0	0	0	0	PM

EASTBOUND (English Colony Way/Rock Springs Rd)

AM	NOON	PM	
0	188	0	⇦
0	0	0	↶ 0
0	68	0	↱ 0
0	16	0	→ 0
0	92	0	↷ 0
AM	NOON	PM	

WESTBOUND (English Colony Way/Rock Springs Rd)

PM	NOON	AM	
0	14	0	0 ↰
0	15	0	0 ←
0	43	0	0 ↶
0	0	0	0 ↷
0	83	0	⇨
PM	NOON	AM	

NORTHBOUND (Taylor Rd)

PM	0	0	0	0	0	PM
NOON	240	0	111	135	61	NOON
AM	0	0	0	0	0	AM

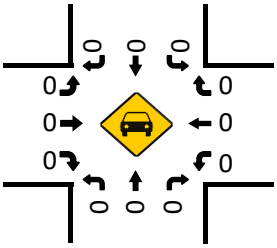
⇩	↶ 0	↰ 0	↑ 0	↱ 0

CONTROL

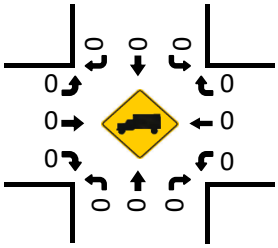
4-Way Stop

TEV	0 AM	728 NOON	0 PM
PHF		0.91	

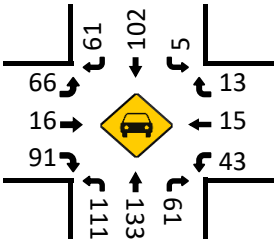
Cars (AM)



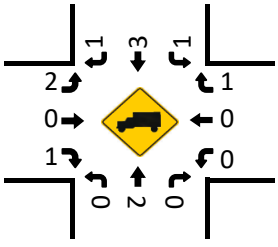
HT (AM)



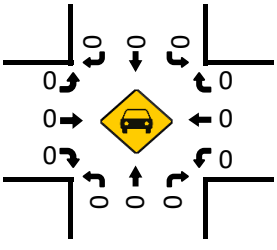
Cars (NOON)



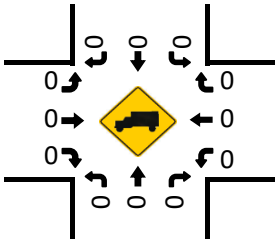
HT (NOON)



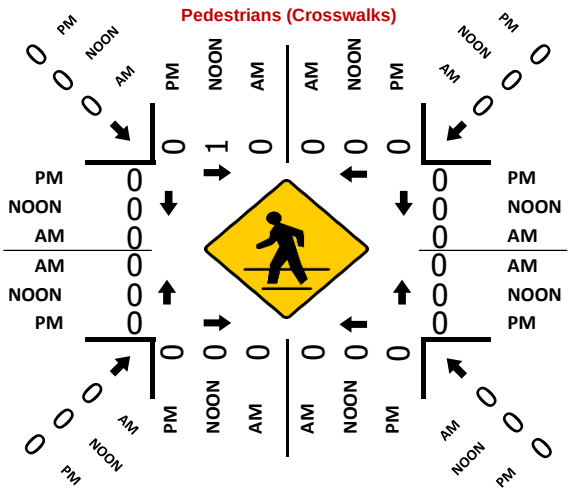
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/16/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	14	30	15	0	1	39	8	0	17	6	25	0	12	5	4	0	176
11:45 AM	16	33	13	0	0	26	12	0	15	2	22	0	14	3	1	0	157
12:00 PM	25	33	17	0	2	29	23	0	10	5	13	0	11	7	2	0	177
12:15 PM	26	29	11	0	1	20	16	0	19	1	21	0	7	3	7	0	161
12:30 PM	32	34	15	0	3	23	12	0	20	5	37	0	15	2	2	0	200
12:45 PM	28	39	18	0	0	33	11	0	19	5	21	0	10	3	3	0	190
1:00 PM	21	35	11	0	3	18	17	0	12	4	16	0	10	2	5	0	154
1:15 PM	29	42	16	0	0	24	12	0	12	2	22	1	11	3	3	0	177
1:30 PM	18	35	9	0	2	25	13	0	14	3	21	0	19	6	0	0	165
1:45 PM	23	37	6	0	2	31	11	0	10	5	40	0	15	3	1	0	184
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	232	347	131	0	14	268	135	0	148	38	238	1	124	37	28	0	1741
APPROACH %'s :	32.68%	48.87%	18.45%	0.00%	3.36%	64.27%	32.37%	0.00%	34.82%	8.94%	56.00%	0.24%	65.61%	19.58%	14.81%	0.00%	
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	111	135	61	0	6	105	62	0	68	16	92	0	43	15	14	0	728
PEAK HR FACTOR :	0.867	0.865	0.847	0.000	0.500	0.795	0.674	0.000	0.850	0.800	0.622	0.000	0.717	0.536	0.500	0.000	0.910
	0.903				0.801				0.710				0.900				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	14	30	14	0	1	39	8	0	16	6	23	0	12	5	3	0	171
11:45 AM	16	32	13	0	0	25	12	0	15	2	22	0	14	3	1	0	155
12:00 PM	25	31	17	0	1	28	23	0	10	5	12	0	11	7	1	0	171
12:15 PM	26	29	11	0	1	20	16	0	17	1	21	0	7	3	7	0	159
12:30 PM	32	34	15	0	3	22	11	0	20	5	37	0	15	2	2	0	198
12:45 PM	28	39	18	0	0	32	11	0	19	5	21	0	10	3	3	0	189
1:00 PM	21	35	11	0	3	18	17	0	12	4	16	0	10	2	4	0	153
1:15 PM	28	42	16	0	0	24	11	0	12	2	21	1	10	3	3	0	173
1:30 PM	18	35	9	0	2	25	13	0	14	3	21	0	19	6	0	0	165
1:45 PM	23	37	6	0	2	31	10	0	10	5	39	0	14	3	1	0	181
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	231	344	130	0	13	264	132	0	145	38	233	1	122	37	25	0	1715
APPROACH %'s :	32.77%	48.79%	18.44%	0.00%	3.18%	64.55%	32.27%	0.00%	34.77%	9.11%	55.88%	0.24%	66.30%	20.11%	13.59%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	111	133	61	0	5	102	61	0	66	16	91	0	43	15	13	0	717
PEAK HR FACTOR :	0.867	0.853	0.847	0.000	0.417	0.797	0.663	0.000	0.825	0.800	0.615	0.000	0.717	0.536	0.464	0.000	0.905
	0.897				0.808				0.698				0.934				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/16/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	1	0	0	0	0	0	1	0	2	0	0	0	1	0	5
11:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	2	0	0	1	1	0	0	0	0	1	0	0	0	1	0	6
12:15 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	4
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	3	1	0	1	4	3	0	3	0	5	0	2	0	3	0	26
APPROACH %'s :	20.00%	60.00%	20.00%	0.00%	12.50%	50.00%	37.50%	0.00%	37.50%	0.00%	62.50%	0.00%	40.00%	0.00%	60.00%	0.00%	
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	0	2	0	0	1	3	1	0	2	0	1	0	0	0	1	0	11
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.250	0.750	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.458
		0.250				0.625				0.375				0.250			

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn
Control: 4-Way Stop

Project ID: 21-070180-003
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				English Colony Way/Rock Springs Rd				English Colony Way/Rock Springs Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	5
12:15 PM	0	2	0	0	0	2	0	0	0	1	0	0	1	0	0	0	6
12:30 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
12:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	5
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	0	0	0	3	5	0	3	2	3	0	1	1	0	0	25
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	37.50%	62.50%	0.00%	37.50%	25.00%	37.50%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	3	4	0	3	1	0	0	1	0	0	0	15
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.375	0.333	0.000	0.375	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.625
	0.375				0.583				0.500				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & English Colony Way/Rock Springs Rd
City: Penryn

Project ID: 21-070180-003
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		English Colony Way/Rock Springs Rd		English Colony Way/Rock Springs Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	1
APPROACH %'s :	100.00%	0.00%							
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.250								0.250
	0.250								

Prepared by National Data & Surveying Services

Taylor Rd & Penryn Rd

Peak Hour Turning Movement Count

ID: 21-070180-004
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:30 PM - 01:30 PM	11:30 AM - 02:00 PM
NONE	NONE

CONTROL: Signalized

	AM	NOON	PM
TEV	0	648	0
PHF		0.94	

SOUTHBOUND (Taylor Rd)

	L	T	R	U	Total	
AM	0	0	0	0	0	AM
NOON	0	110	130	0	335	NOON
PM	0	0	0	0	0	PM

WESTBOUND (Penryn Rd)

	L	T	R
PM	0	175	0
NOON	0	0	0
AM	0	30	0
	0	0	0
	0	171	0

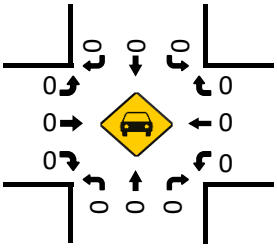
EASTBOUND (Penryn Rd)

	L	T	R
AM	0	1	0
NOON	0	0	0
PM	0	0	0
	0	0	0
	0	1	0

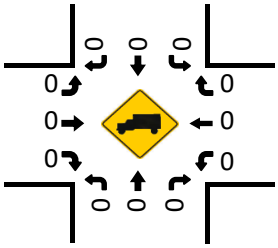
NORTHBOUND (Taylor Rd)

	L	T	R	U	Total	
PM	0	0	0	0	0	PM
NOON	141	0	1	160	41	NOON
AM	0	0	0	0	0	AM

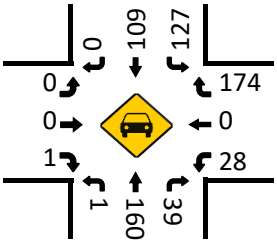
Cars (AM)



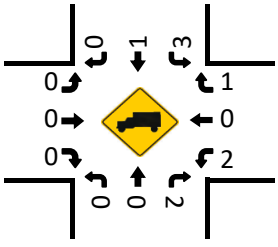
HT (AM)



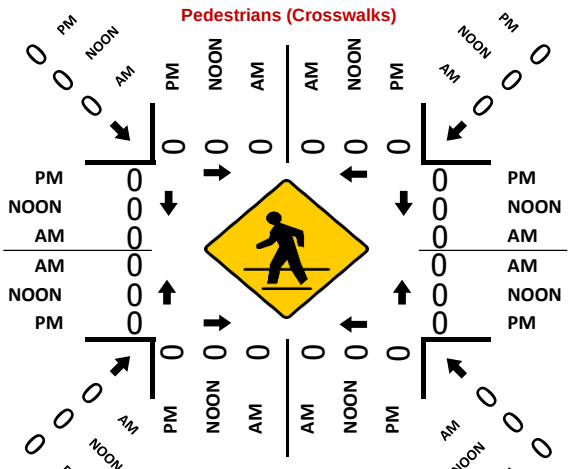
Cars (NOON)



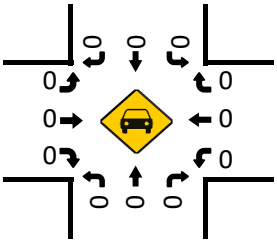
HT (NOON)



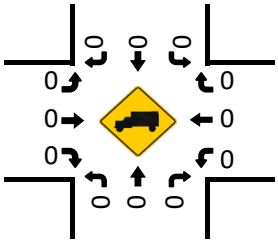
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/16/2021

Data - Total

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	31	7	0	46	29	1	0	0	0	1	0	14	1	41	0	171
11:45 AM	0	35	11	0	45	20	0	0	0	1	0	0	8	1	31	0	152
12:00 PM	1	36	11	0	22	34	0	0	0	0	1	0	15	1	42	0	163
12:15 PM	0	30	10	0	27	23	0	0	0	0	0	0	5	0	43	0	138
12:30 PM	0	40	12	0	44	29	0	0	0	0	0	0	7	0	41	0	173
12:45 PM	0	41	9	0	26	38	0	0	0	0	0	0	4	0	49	0	167
1:00 PM	1	42	15	0	28	22	0	0	0	0	1	0	8	0	36	0	153
1:15 PM	0	37	5	0	32	21	0	0	0	0	0	0	11	0	49	0	155
1:30 PM	0	40	5	0	41	24	0	0	0	0	0	0	1	0	23	0	134
1:45 PM	1	39	9	0	38	48	0	0	0	0	1	0	4	0	28	0	168
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	371	94	0	349	288	1	0	0	1	4	0	77	3	383	0	1574
APPROACH %'s :	0.64%	79.27%	20.09%	0.00%	54.70%	45.14%	0.16%	0.00%	0.00%	20.00%	80.00%	0.00%	16.63%	0.65%	82.72%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	1	160	41	0	130	110	0	0	0	0	1	0	30	0	175	0	648
PEAK HR FACTOR :	0.250	0.952	0.683	0.000	0.739	0.724	0.000	0.000	0.000	0.000	0.250	0.000	0.682	0.000	0.893	0.000	0.936
		0.871				0.822				0.250				0.854			

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	30	7	0	45	29	1	0	0	0	1	0	14	1	41	0	169
11:45 AM	0	35	10	0	43	20	0	0	0	1	0	0	8	1	30	0	148
12:00 PM	1	34	11	0	21	33	0	0	0	0	1	0	13	1	42	0	157
12:15 PM	0	30	10	0	27	23	0	0	0	0	0	0	4	0	43	0	137
12:30 PM	0	40	12	0	43	29	0	0	0	0	0	0	6	0	41	0	171
12:45 PM	0	41	8	0	26	37	0	0	0	0	0	0	4	0	49	0	165
1:00 PM	1	42	14	0	28	22	0	0	0	0	1	0	8	0	36	0	152
1:15 PM	0	37	5	0	30	21	0	0	0	0	0	0	10	0	48	0	151
1:30 PM	0	40	5	0	41	24	0	0	0	0	0	0	1	0	23	0	134
1:45 PM	1	39	9	0	37	48	0	0	0	0	1	0	4	0	28	0	167
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	368	91	0	341	286	1	0	0	1	4	0	72	3	381	0	1551
APPROACH %'s :	0.65%	79.65%	19.70%	0.00%	54.30%	45.54%	0.16%	0.00%	0.00%	20.00%	80.00%	0.00%	15.79%	0.66%	83.55%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	1	160	39	0	127	109	0	0	0	0	1	0	28	0	174	0	639
PEAK HR FACTOR :	0.250	0.952	0.696	0.000	0.738	0.736	0.000	0.000	0.000	0.000	0.250	0.000	0.700	0.000	0.888	0.000	0.934
	0.877				0.819				0.250				0.871				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/16/2021

Data - HT

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	4
12:00 PM	0	2	0	0	1	1	0	0	0	0	0	0	2	0	0	0	6
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2
12:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	1	0	1	0	4
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	3	0	8	2	0	0	0	0	0	0	5	0	2	0	23
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	80.00%	20.00%	0.00%	0.00%					71.43%	0.00%	28.57%	0.00%	
PEAK HR :	**12:30 PM - 01:30 PM**																TOTAL
PEAK HR VOL :	0	0	2	0	3	1	0	0	0	0	0	0	2	0	1	0	9
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.563
	0.500				0.500								0.375				

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn
Control: Signalized

Project ID: 21-070180-004
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Taylor Rd				Taylor Rd				Penryn Rd				Penryn Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	4	0	0	7	0	0	0	0	0	0	0	0	0	0	18
APPROACH %'s :	0.00%	63.64%	36.36%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	0	4	1	0	0	2	0	0	0	0	0	0	0	0	0	0	7
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438
	0.417				0.500												

National Data & Surveying Services Intersection Turning Movement Count

Location: Taylor Rd & Penryn Rd
City: Penryn

Project ID: 21-070180-004
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Taylor Rd		Taylor Rd		Penryn Rd		Penryn Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Penryn Rd & I-80 EB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-005
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS	NONE	11:45 AM - 12:45 PM	NONE

COUNT PERIODS	NONE	11:30 AM - 02:00 PM	NONE

CONTROL: 2-Way Stop(EB/WB)

	AM	NOON	PM
TEV	0	766	0
PHF		0.97	

SOUTHBOUND (Penryn Rd)

AM	0	0	0	0	0	AM
NOON	70	66	18	0	418	NOON
PM	0	0	0	0	0	PM

EASTBOUND (I-80 EB Ramps)

AM	NOON	PM
0	110	0
0	0	0
0	196	0
0	11	0
0	131	0

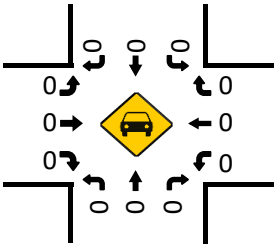
WESTBOUND (I-80 EB Ramps)

PM	NOON	AM
0	17	0
0	3	0
0	7	0
0	0	0
0	34	0

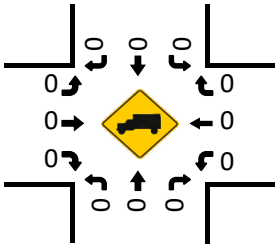
NORTHBOUND (Penryn Rd)

PM	0	0	0	0	0	PM
NOON	204	0	37	205	5	NOON
AM	0	0	0	0	0	AM

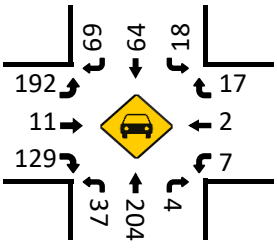
Cars (AM)



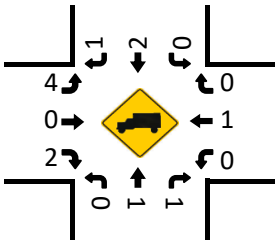
HT (AM)



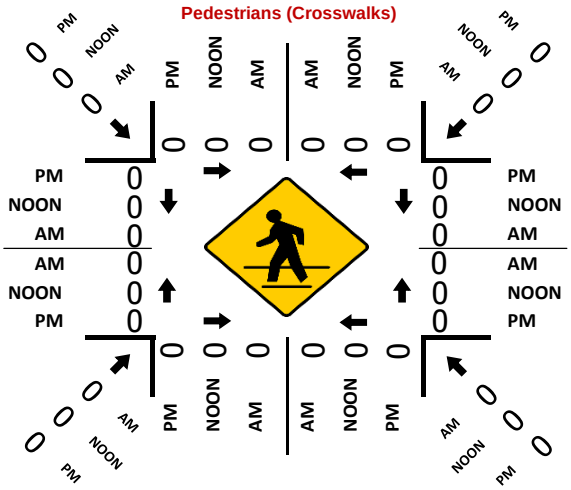
Cars (NOON)



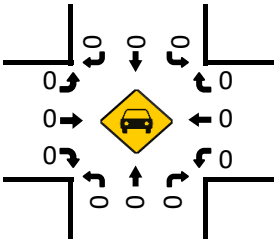
HT (NOON)



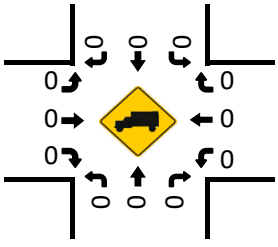
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/16/2021

Data - Total

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	11	33	3	0	3	26	8	1	54	5	30	2	0	2	3	0	181
11:45 AM	9	62	1	0	7	16	18	0	34	5	37	0	3	1	5	0	198
12:00 PM	9	51	1	0	7	11	12	0	51	4	35	0	0	0	9	0	190
12:15 PM	9	48	1	0	1	14	21	0	52	1	32	0	3	2	3	0	187
12:30 PM	10	44	2	0	3	25	19	0	59	1	27	0	1	0	0	0	191
12:45 PM	8	42	0	0	0	22	7	0	60	3	34	0	0	1	2	0	179
1:00 PM	7	37	1	0	1	14	8	0	47	2	36	0	0	0	4	0	157
1:15 PM	8	55	2	0	4	20	16	0	63	1	28	0	0	5	10	0	212
1:30 PM	7	30	0	0	6	13	6	0	26	4	32	0	0	0	2	0	126
1:45 PM	8	29	3	0	9	19	10	2	45	5	22	0	1	1	4	0	158
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	86	431	14	0	41	180	125	3	491	31	313	2	8	12	42	0	1779
APPROACH %'s :	16.20%	81.17%	2.64%	0.00%	11.75%	51.58%	35.82%	0.86%	58.66%	3.70%	37.40%	0.24%	12.90%	19.35%	67.74%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	37	205	5	0	18	66	70	0	196	11	131	0	7	3	17	0	766
PEAK HR FACTOR :	0.925	0.827	0.625	0.000	0.643	0.660	0.833	0.000	0.831	0.550	0.885	0.000	0.583	0.375	0.472	0.000	0.967
	0.858				0.819				0.939				0.750				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	10	32	3	0	3	26	8	1	54	5	30	2	0	2	3	0	179
11:45 AM	9	62	0	0	7	14	17	0	33	5	35	0	3	0	5	0	190
12:00 PM	9	50	1	0	7	11	12	0	48	4	35	0	0	0	9	0	186
12:15 PM	9	48	1	0	1	14	21	0	52	1	32	0	3	2	3	0	187
12:30 PM	10	44	2	0	3	25	19	0	59	1	27	0	1	0	0	0	191
12:45 PM	8	41	0	0	0	21	7	0	60	2	34	0	0	1	2	0	176
1:00 PM	7	37	1	0	1	14	8	0	47	2	33	0	0	0	4	0	154
1:15 PM	8	54	2	0	4	20	16	0	62	1	28	0	0	5	10	0	210
1:30 PM	7	29	0	0	6	13	6	0	25	4	31	0	0	0	2	0	123
1:45 PM	8	27	3	0	9	17	9	2	45	5	22	0	1	1	4	0	153
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	85	424	13	0	41	175	123	3	485	30	307	2	8	11	42	0	1749
APPROACH %'s :	16.28%	81.23%	2.49%	0.00%	11.99%	51.17%	35.96%	0.88%	58.86%	3.64%	37.26%	0.24%	13.11%	18.03%	68.85%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	37	204	4	0	18	64	69	0	192	11	129	0	7	2	17	0	754
PEAK HR FACTOR :	0.925	0.823	0.500	0.000	0.643	0.640	0.821	0.000	0.814	0.550	0.921	0.000	0.583	0.250	0.472	0.000	0.987
	0.863				0.803				0.954				0.722				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/16/2021

Data - HT

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	1	0	0	2	1	0	1	0	2	0	0	1	0	0	8
12:00 PM	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
1:15 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
1:30 PM	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
1:45 PM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	7	1	0	0	5	2	0	6	1	6	0	0	1	0	0	30
APPROACH %'s :	11.11%	77.78%	11.11%	0.00%	0.00%	71.43%	28.57%	0.00%	46.15%	7.69%	46.15%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	1	1	0	0	2	1	0	4	0	2	0	0	1	0	0	12
PEAK HR FACTOR :	0.000	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.333	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.375
	0.500				0.250				0.500				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn
Control: 2-Way Stop(EB/WB)

Project ID: 21-070180-005
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 EB Ramps				I-80 EB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	3	0	0	0	0	0	0	0	2	0	0	0	7
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
	0.250				0.250												

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 EB Ramps
City: Penryn

Project ID: 21-070180-005
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Penryn Rd		Penryn Rd		I-80 EB Ramps		I-80 EB Ramps		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Penryn Rd & I-80 WB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-006
City: Penryn

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
11:45 AM - 12:45 PM	11:30 AM - 02:00 PM
NONE	NONE

CONTROL: Signalized

	AM	NOON	PM
TEV	0	913	0
PHF		0.95	

SOUTHBOUND (Penryn Rd)

AM	0	0	0	0	0	AM
NOON	33	62	139	0	246	NOON
PM	0	0	0	0	0	PM

EASTBOUND (I-80 WB Ramps)

AM	NOON	PM
0	147	0
0	0	0
0	21	0
0	63	0
0	55	0

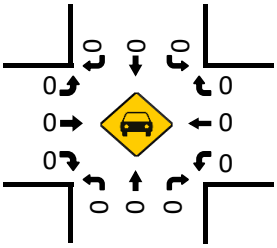
WESTBOUND (I-80 WB Ramps)

PM	NOON	AM
0	40	0
0	51	0
0	35	0
0	0	0
0	368	0

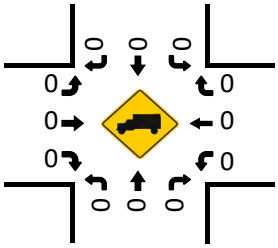
NORTHBOUND (Penryn Rd)

PM	0	0	0	0	0	PM
NOON	152	0	63	185	166	NOON
AM	0	0	0	0	0	AM

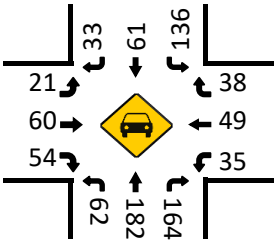
Cars (AM)



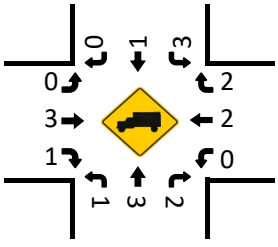
HT (AM)



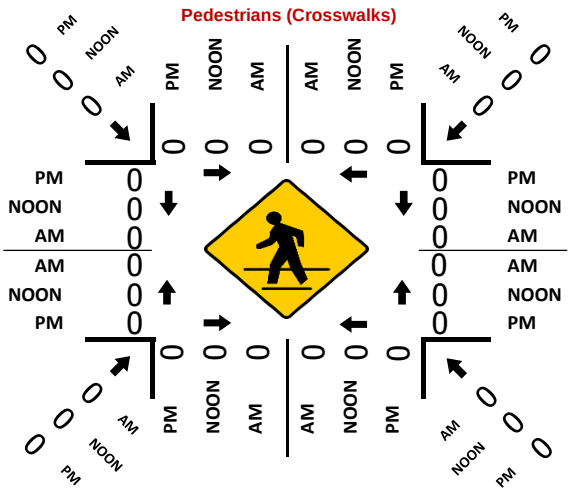
Cars (NOON)



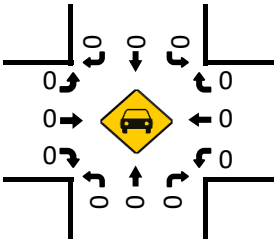
HT (NOON)



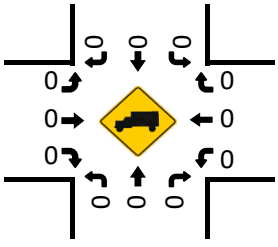
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/16/2021

Data - Total

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	10	55	24	0	39	17	10	0	2	15	11	0	12	16	7	0	218
11:45 AM	13	40	50	0	44	19	3	0	4	18	15	0	5	15	9	0	235
12:00 PM	11	51	42	0	28	11	7	0	8	15	11	0	9	11	13	0	217
12:15 PM	16	49	43	0	29	12	12	0	6	14	17	0	6	11	6	0	221
12:30 PM	23	45	31	0	38	20	11	0	3	16	12	0	15	14	12	0	240
12:45 PM	20	50	37	0	24	9	6	0	8	14	15	0	5	16	6	0	210
1:00 PM	21	41	29	0	37	11	10	0	5	16	7	0	8	12	7	0	204
1:15 PM	19	51	55	0	28	12	6	0	4	16	14	0	12	8	7	0	232
1:30 PM	10	23	28	0	37	8	9	0	4	11	12	0	5	17	6	0	170
1:45 PM	14	37	27	0	28	16	8	0	5	12	12	0	13	15	5	0	192
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	157	442	366	0	332	135	82	0	49	147	126	0	90	135	78	0	2139
APPROACH %'s :	16.27%	45.80%	37.93%	0.00%	60.47%	24.59%	14.94%	0.00%	15.22%	45.65%	39.13%	0.00%	29.70%	44.55%	25.74%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	63	185	166	0	139	62	33	0	21	63	55	0	35	51	40	0	913
PEAK HR FACTOR :	0.685	0.907	0.830	0.000	0.790	0.775	0.688	0.000	0.656	0.875	0.809	0.000	0.583	0.850	0.769	0.000	0.951
	0.958				0.848				0.939				0.768				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	10	55	24	0	38	16	10	0	2	15	11	0	12	15	7	0	215
11:45 AM	12	39	50	0	42	18	3	0	4	17	14	0	5	15	9	0	228
12:00 PM	11	49	40	0	28	11	7	0	8	14	11	0	9	11	11	0	210
12:15 PM	16	49	43	0	28	12	12	0	6	14	17	0	6	10	6	0	219
12:30 PM	23	45	31	0	38	20	11	0	3	15	12	0	15	13	12	0	238
12:45 PM	20	50	37	0	23	8	6	0	8	14	15	0	5	16	6	0	208
1:00 PM	21	40	29	0	37	11	10	0	5	16	7	0	8	11	7	0	202
1:15 PM	19	50	54	0	27	12	6	0	4	15	14	0	12	8	7	0	228
1:30 PM	10	22	27	0	37	8	9	0	4	11	11	0	5	17	6	0	167
1:45 PM	13	37	26	0	28	14	8	0	5	12	12	0	13	15	5	0	188
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	155	436	361	0	326	130	82	0	49	143	124	0	90	131	76	0	2103
APPROACH %'s :	16.28%	45.80%	37.92%	0.00%	60.59%	24.16%	15.24%	0.00%	15.51%	45.25%	39.24%	0.00%	30.30%	44.11%	25.59%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	62	182	164	0	136	61	33	0	21	60	54	0	35	49	38	0	895
PEAK HR FACTOR :	0.674	0.929	0.820	0.000	0.810	0.763	0.688	0.000	0.656	0.882	0.794	0.000	0.583	0.817	0.792	0.000	0.940
	0.944				0.833				0.912				0.763				

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/16/2021

Data - HT

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	3
11:45 AM	1	1	0	0	2	1	0	0	0	1	1	0	0	0	0	0	7
12:00 PM	0	2	2	0	0	0	0	0	0	1	0	0	0	0	2	0	7
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
12:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
1:15 PM	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	4
1:30 PM	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3
1:45 PM	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	6	5	0	6	5	0	0	0	4	2	0	0	4	2	0	36
APPROACH %'s :	15.38%	46.15%	38.46%	0.00%	54.55%	45.45%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	1	3	2	0	3	1	0	0	0	3	1	0	0	2	2	0	18
PEAK HR FACTOR :	0.250	0.375	0.250	0.000	0.375	0.250	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.500	0.250	0.000	0.643
		0.375				0.333				0.500				0.500			

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn
Control: Signalized

Project ID: 21-070180-006
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Penryn Rd				Penryn Rd				I-80 WB Ramps				I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	5	0	0	0	2	0	0	0	0	0	8
APPROACH %'s :					0.00%	16.67%	83.33%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	4	0	0	0	2	0	0	0	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.333	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.583
							0.417				0.250						

National Data & Surveying Services Intersection Turning Movement Count

Location: Penryn Rd & I-80 WB Ramps
City: Penryn

Project ID: 21-070180-006
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Penryn Rd		Penryn Rd		I-80 WB Ramps		I-80 WB Ramps		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Newcastle Rd & I-80 EB Ramps/Indian Hill Rd

Peak Hour Turning Movement Count

ID: 21-070180-007
City: Newcastle

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
AM: NONE	AM: NONE
NOON: 12:15 PM - 01:15 PM	NOON: 11:30 AM - 02:00 PM
PM: NONE	PM: NONE

CONTROL: Signalized

	AM	NOON	PM
TEV	0	911	0
PHF		0.99	

SOUTHBOUND (Newcastle Rd)

	Left	Thru	Right	U-turn	Total
AM	0	0	0	0	0
NOON	39	90	64	0	400
PM	0	0	0	0	0

EASTBOUND (I-80 EB Ramps/Indian Hill Rd)

	Left	Thru	Right	U-turn
AM	0	0	0	0
NOON	0	87	0	0
PM	0	157	0	0
	0	59	0	0

	AM	NOON	PM
	0	115	0

WESTBOUND (I-80 EB Ramps/Indian Hill Rd)

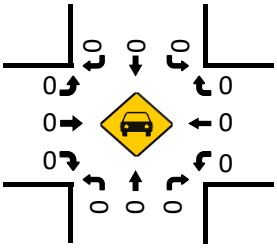
	Left	Thru	Right	U-turn
PM	0	223	0	0
NOON	0	20	0	0
AM	0	15	0	0
	0	0	0	0

	AM	NOON	PM
	0	232	0

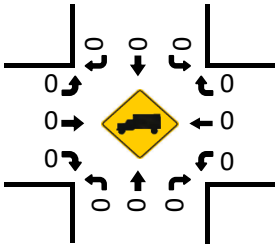
NORTHBOUND (Newcastle Rd)

	Left	Thru	Right	U-turn	Total
PM	0	0	0	0	0
NOON	164	0	56	90	11
AM	0	0	0	0	0

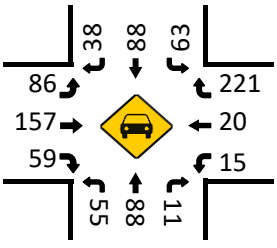
Cars (AM)



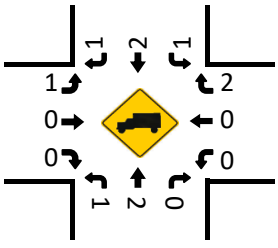
HT (AM)



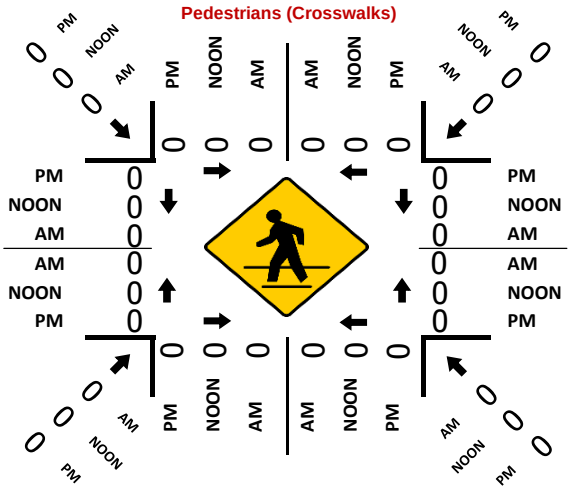
Cars (NOON)



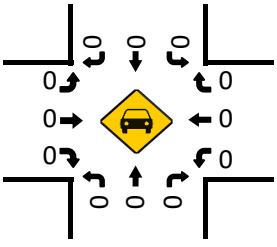
HT (NOON)



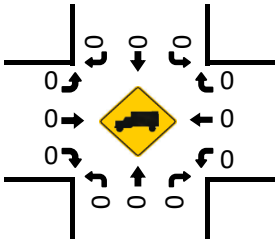
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/16/2021

Data - Total

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	15	19	3	0	10	27	8	0	13	30	10	0	4	7	35	0	181
11:45 AM	17	27	5	0	21	32	6	0	18	36	16	0	3	7	52	0	240
12:00 PM	16	20	4	0	11	20	7	0	18	29	20	0	4	2	49	0	200
12:15 PM	17	18	2	0	22	23	8	0	20	45	6	0	7	5	57	0	230
12:30 PM	17	24	5	0	17	22	12	0	13	37	18	0	6	5	54	0	230
12:45 PM	11	20	2	0	11	28	5	0	31	30	18	0	2	7	55	0	220
1:00 PM	11	28	2	0	14	17	14	0	23	45	17	0	0	3	57	0	231
1:15 PM	12	19	7	0	20	21	7	0	20	39	9	0	3	6	54	0	217
1:30 PM	13	17	5	0	13	14	11	0	17	31	9	0	5	7	48	0	190
1:45 PM	8	14	4	0	20	22	9	0	11	48	9	0	2	5	44	0	196
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	137	206	39	0	159	226	87	0	184	370	132	0	36	54	505	0	2135
APPROACH %'s :	35.86%	53.93%	10.21%	0.00%	33.69%	47.88%	18.43%	0.00%	26.82%	53.94%	19.24%	0.00%	6.05%	9.08%	84.87%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	56	90	11	0	64	90	39	0	87	157	59	0	15	20	223	0	911
PEAK HR FACTOR :	0.824	0.804	0.550	0.000	0.727	0.804	0.696	0.000	0.702	0.872	0.819	0.000	0.536	0.714	0.978	0.000	0.986
	0.853				0.910				0.891				0.935				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	15	19	3	0	10	26	8	0	13	30	10	0	4	7	35	0	180
11:45 AM	17	27	5	0	20	32	6	0	17	36	15	0	3	7	51	0	236
12:00 PM	15	20	4	0	11	20	7	0	18	29	19	0	4	2	49	0	198
12:15 PM	16	18	2	0	21	23	8	0	20	45	6	0	7	5	57	0	228
12:30 PM	17	23	5	0	17	22	12	0	13	37	18	0	6	5	54	0	229
12:45 PM	11	20	2	0	11	27	5	0	30	30	18	0	2	7	53	0	216
1:00 PM	11	27	2	0	14	16	13	0	23	45	17	0	0	3	57	0	228
1:15 PM	12	19	7	0	20	21	7	0	20	39	9	0	3	6	54	0	217
1:30 PM	13	17	5	0	13	14	11	0	17	31	9	0	5	7	47	0	189
1:45 PM	7	14	4	0	20	22	9	0	11	47	9	0	2	5	43	0	193
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	134	204	39	0	157	223	86	0	182	369	130	0	36	54	500	0	2114
APPROACH %'s :	35.54%	54.11%	10.34%	0.00%	33.69%	47.85%	18.45%	0.00%	26.73%	54.19%	19.09%	0.00%	6.10%	9.15%	84.75%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	55	88	11	0	63	88	38	0	86	157	59	0	15	20	221	0	901
PEAK HR FACTOR :	0.809	0.815	0.550	0.000	0.750	0.815	0.731	0.000	0.717	0.872	0.819	0.000	0.536	0.714	0.969	0.000	0.984
	0.856				0.909				0.888				0.928				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/16/2021

Data - HT

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	0	4
12:00 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
12:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	4
1:00 PM	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:45 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	2	0	0	2	3	1	0	2	1	2	0	0	0	5	0	21
APPROACH %'s :	60.00%	40.00%	0.00%	0.00%	33.33%	50.00%	16.67%	0.00%	40.00%	20.00%	40.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	1	2	0	0	1	2	1	0	1	0	0	0	0	0	2	0	10
PEAK HR FACTOR :	0.250	0.500	0.000	0.000	0.250	0.500	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.625
	0.750				0.500				0.250				0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Control: Signalized

Project ID: 21-070180-007
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Newcastle Rd				Newcastle Rd				I-80 EB Ramps/Indian Hill Rd				I-80 EB Ramps/Indian Hill Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
12:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	4
1:00 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
1:15 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	4
1:30 PM	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	6
1:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	1	0	8	17	0	0	0	0	0	0	2	0	2	0	33
APPROACH %'s :	0.00%	75.00%	25.00%	0.00%	32.00%	68.00%	0.00%	0.00%					50.00%	0.00%	50.00%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	0	2	1	0	4	5	0	0	0	0	0	0	2	0	0	0	14
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.500	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.875
	0.375				0.563								0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Newcastle Rd & I-80 EB Ramps/Indian Hill Rd
City: Newcastle
Project ID: 21-070180-007
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Newcastle Rd		Newcastle Rd		I-80 EB Ramps/Indian Hill Rd		I-80 EB Ramps/Indian Hill Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

I-80 WB Ramps & Newcastle Rd

Peak Hour Turning Movement Count

ID: 21-070180-008
City: Newcastle

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
11:45 AM - 12:45 PM	11:30 AM - 02:00 PM
NONE	NONE

CONTROL: 1-Way Stop(SB)

	AM	NOON	PM
TEV	0	707	0
PHF		0.92	

SOUTHBOUND (I-80 WB Ramps)

AM	0	0	0	0	0	AM
NOON	41	0	93	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Newcastle Rd)

AM	NOON	PM	
0	190	0	
0	0	0	0
0	0	0	0
0	107	0	0
0	95	0	0
AM	NOON	PM	

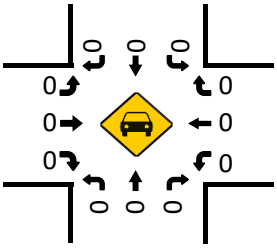
WESTBOUND (Newcastle Rd)

PM	NOON	AM	
0	0	0	0
0	149	0	0
0	222	0	0
0	0	0	0
0	200	0	
PM	NOON	AM	

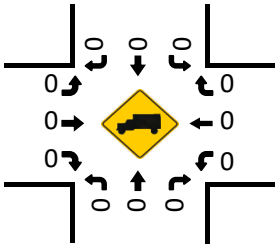
NORTHBOUND (I-80 WB Ramps)

PM	0	0	0	0	0	PM
NOON	317	0	0	0	0	NOON
AM	0	0	0	0	0	AM

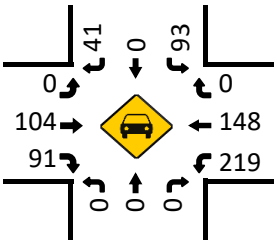
Cars (AM)



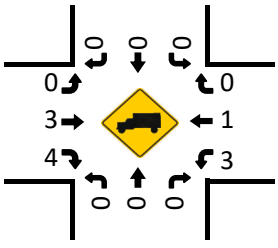
HT (AM)



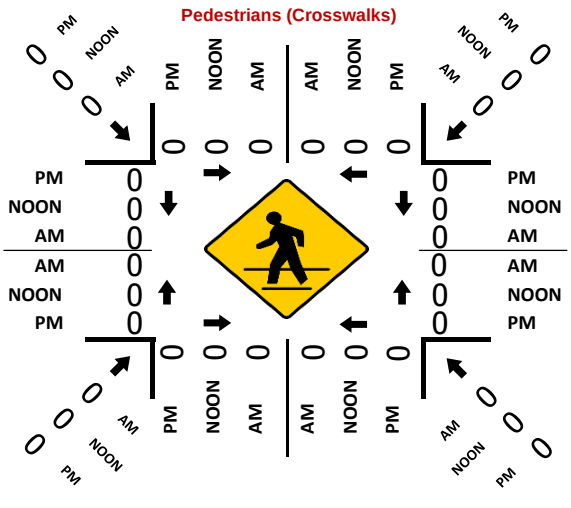
Cars (NOON)



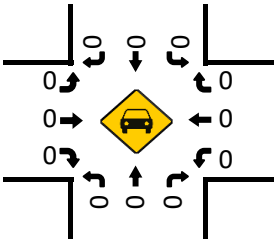
HT (NOON)



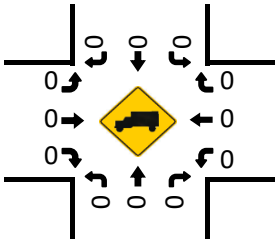
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/16/2021

Data - Total

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	27	0	10	0	0	18	17	0	32	32	0	0	136
11:45 AM	0	0	0	0	28	0	16	0	0	31	19	0	54	45	0	0	193
12:00 PM	0	0	0	0	19	0	7	0	0	20	24	0	46	41	0	0	157
12:15 PM	0	0	0	0	25	0	12	0	0	24	25	0	61	33	0	0	180
12:30 PM	0	0	0	0	21	0	6	0	0	32	27	0	61	30	0	0	177
12:45 PM	0	0	0	0	19	0	5	0	0	24	12	0	45	55	0	0	160
1:00 PM	0	0	0	0	15	1	13	0	0	29	16	0	55	55	0	0	184
1:15 PM	0	0	0	0	24	0	8	0	0	25	14	0	53	38	0	0	162
1:30 PM	0	0	0	0	16	0	4	0	0	24	17	0	46	39	0	0	146
1:45 PM	0	0	0	0	22	0	13	0	0	28	18	0	44	26	0	0	151
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	216	1	94	0	0	255	189	0	497	394	0	0	1646
APPROACH %'s :					69.45%	0.32%	30.23%	0.00%	0.00%	57.43%	42.57%	0.00%	55.78%	44.22%	0.00%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	93	0	41	0	0	107	95	0	222	149	0	0	707
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.830	0.000	0.641	0.000	0.000	0.836	0.880	0.000	0.910	0.828	0.000	0.000	0.916
					0.761				0.856				0.937				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/16/2021

Data - Cars

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	26	0	10	0	0	17	17	0	32	32	0	0	134
11:45 AM	0	0	0	0	28	0	16	0	0	30	18	0	52	44	0	0	188
12:00 PM	0	0	0	0	19	0	7	0	0	20	22	0	46	41	0	0	155
12:15 PM	0	0	0	0	25	0	12	0	0	23	25	0	61	33	0	0	179
12:30 PM	0	0	0	0	21	0	6	0	0	31	26	0	60	30	0	0	174
12:45 PM	0	0	0	0	19	0	5	0	0	24	12	0	44	55	0	0	159
1:00 PM	0	0	0	0	14	1	12	0	0	28	16	0	54	53	0	0	178
1:15 PM	0	0	0	0	24	0	8	0	0	25	14	0	53	38	0	0	162
1:30 PM	0	0	0	0	16	0	3	0	0	24	17	0	46	38	0	0	144
1:45 PM	0	0	0	0	22	0	13	0	0	28	18	0	44	26	0	0	151
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	214	1	92	0	0	250	185	0	492	390	0	0	1624
APPROACH %'s :					69.71%	0.33%	29.97%	0.00%	0.00%	57.47%	42.53%	0.00%	55.78%	44.22%	0.00%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	93	0	41	0	0	104	91	0	219	148	0	0	696
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.830	0.000	0.641	0.000	0.000	0.839	0.875	0.000	0.898	0.841	0.000	0.000	0.926
					0.761				0.855				0.956				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/16/2021

Data - HT

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	5
12:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1:00 PM	0	0	0	0	1	0	1	0	0	1	0	0	1	2	0	0	6
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	2	0	0	5	4	0	5	4	0	0	22
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	0.00%	55.56%	44.44%	0.00%	55.56%	44.44%	0.00%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	4	0	3	1	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.500	0.000	0.375	0.250	0.000	0.000	0.550
										0.875				0.333			

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle
Control: 1-Way Stop(SB)

Project ID: 21-070180-008
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	I-80 WB Ramps				I-80 WB Ramps				Newcastle Rd				Newcastle Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
12:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
1:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	25	0	0	0	3	0	0	29
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	9	0	0	0	1	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.563	0.000	0.000	0.000	0.250	0.000	0.000	0.688
							0.250			0.563				0.250			

National Data & Surveying Services Intersection Turning Movement Count

Location: I-80 WB Ramps & Newcastle Rd
City: Newcastle

Project ID: 21-070180-008
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	I-80 WB Ramps		I-80 WB Ramps		Newcastle Rd		Newcastle Rd		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Ophir Rd & Taylor Rd/I-80 WB Ramps

Peak Hour Turning Movement Count

ID: 21-070180-009
City: Newcastle

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
NONE	NONE
11:45 AM - 12:45 PM	11:30 AM - 02:00 PM
NONE	NONE

SOUTHBOUND (Ophir Rd)

AM	0	0	0	0	0	AM
NOON	77	7	79	0	169	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Taylor Rd/I-80 WB Ramps)

AM	NOON	PM	
0	339	0	
0	0	0	0
0	86	0	0
0	32	0	0
0	293	0	0
AM	NOON	PM	

WESTBOUND (Taylor Rd/I-80 WB Ramps)

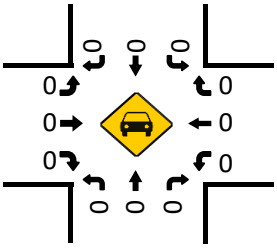
PM	NOON	AM	
0	11	0	0
0	234	0	0
0	4	0	0
0	0	0	0
0	121	0	
PM	NOON	AM	

NORTHBOUND (Ophir Rd)

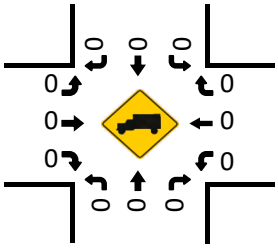
PM	0	0	0	0	0	PM
NOON	304	0	28	72	10	NOON
AM	0	0	0	0	0	AM

CONTROL			
4-Way Stop			
TEV	0 AM	933 NOON	0 PM
PHF		0.87	

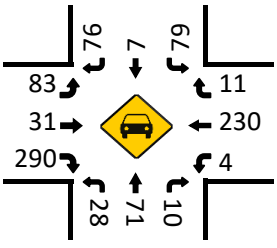
Cars (AM)



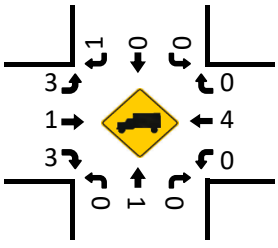
HT (AM)



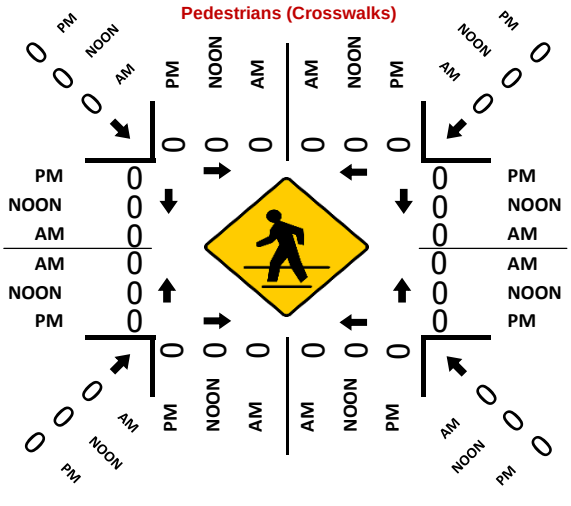
Cars (NOON)



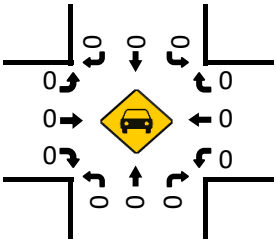
HT (NOON)



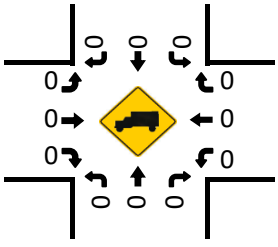
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/16/2021

Data - Total

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	8	16	1	0	18	5	18	0	16	7	61	1	3	44	3	0	201
11:45 AM	8	18	3	0	16	1	15	0	18	5	55	0	1	62	6	0	208
12:00 PM	6	17	1	0	19	2	23	0	17	8	70	0	2	58	1	0	224
12:15 PM	6	14	1	0	26	2	22	0	19	12	80	0	0	48	2	0	232
12:30 PM	8	23	5	0	18	2	17	0	32	7	88	0	1	66	2	0	269
12:45 PM	2	15	0	0	11	0	17	0	20	6	63	0	2	59	2	0	197
1:00 PM	5	13	2	0	23	3	20	0	18	5	51	1	0	43	4	0	188
1:15 PM	6	17	1	0	28	3	22	0	23	3	54	0	1	58	2	0	218
1:30 PM	1	12	2	0	20	0	23	0	24	3	75	0	1	53	6	0	220
1:45 PM	5	11	2	0	19	1	16	1	21	5	64	0	1	56	3	0	205
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	55	156	18	0	198	19	193	1	208	61	661	2	12	547	31	0	2162
APPROACH %'s :	24.02%	68.12%	7.86%	0.00%	48.18%	4.62%	46.96%	0.24%	22.32%	6.55%	70.92%	0.21%	2.03%	92.71%	5.25%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	28	72	10	0	79	7	77	0	86	32	293	0	4	234	11	0	933
PEAK HR FACTOR :	0.875	0.783	0.500	0.000	0.760	0.875	0.837	0.000	0.672	0.667	0.832	0.000	0.500	0.886	0.458	0.000	0.867
	0.764				0.815				0.809				0.902				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	8	16	1	0	18	4	17	0	16	7	57	1	3	44	3	0	195
11:45 AM	8	18	3	0	16	1	15	0	17	5	53	0	1	62	6	0	205
12:00 PM	6	16	1	0	19	2	23	0	16	8	70	0	2	56	1	0	220
12:15 PM	6	14	1	0	26	2	22	0	18	11	80	0	0	48	2	0	230
12:30 PM	8	23	5	0	18	2	16	0	32	7	87	0	1	64	2	0	265
12:45 PM	2	15	0	0	11	0	17	0	20	6	62	0	2	59	2	0	196
1:00 PM	5	13	1	0	23	3	20	0	18	5	49	1	0	43	4	0	185
1:15 PM	6	17	1	0	28	3	22	0	23	3	52	0	1	58	2	0	216
1:30 PM	1	12	2	0	19	0	23	0	24	3	75	0	1	53	5	0	218
1:45 PM	5	11	2	0	19	1	16	1	21	5	64	0	1	54	3	0	203
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	55	155	17	0	197	18	191	1	205	60	649	2	12	541	30	0	2133
APPROACH %'s :	24.23%	68.28%	7.49%	0.00%	48.40%	4.42%	46.93%	0.25%	22.38%	6.55%	70.85%	0.22%	2.06%	92.80%	5.15%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	28	71	10	0	79	7	76	0	83	31	290	0	4	230	11	0	920
PEAK HR FACTOR :	0.875	0.772	0.500	0.000	0.760	0.875	0.826	0.000	0.648	0.705	0.833	0.000	0.500	0.898	0.458	0.000	0.868
	0.757				0.810				0.802				0.888				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/16/2021

Data - HT

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	1	1	0	0	0	4	0	0	0	0	0	6
11:45 AM	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
12:00 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	2	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	4
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:00 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
1:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	1	0	1	1	2	0	3	1	12	0	0	6	1	0	29
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	25.00%	25.00%	50.00%	0.00%	18.75%	6.25%	75.00%	0.00%	0.00%	85.71%	14.29%	0.00%	
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	1	0	3	1	3	0	0	4	0	0	13
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.750	0.250	0.375	0.000	0.000	0.500	0.000	0.000	0.813
	0.250				0.250				0.583				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle
Control: 4-Way Stop

Project ID: 21-070180-009
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Ophir Rd				Ophir Rd				Taylor Rd/I-80 WB Ramps				Taylor Rd/I-80 WB Ramps				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	5	0	2	0	0	0	0	0	0	0	7
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	7	0	9	0	0	0	0	0	0	0	16
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	6	0	5	0	0	0	0	0	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.300	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.393
					0.300				0.625								

National Data & Surveying Services Intersection Turning Movement Count

Location: Ophir Rd & Taylor Rd/I-80 WB Ramps
City: Newcastle

Project ID: 21-070180-009
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Ophir Rd		Ophir Rd		Taylor Rd/I-80 WB Ramps		Taylor Rd/I-80 WB Ramps		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193

Peak Hour Turning Movement Count

ID: 21-070180-010
City: Newcastle

Day: Saturday
Date: 10/16/2021

PEAK HOURS	COUNT PERIODS
AM: NONE	AM: NONE
NOON: 11:45 AM - 12:45 PM	NOON: 11:30 AM - 02:00 PM
PM: NONE	PM: NONE

CONTROL: 2-Way Stop(NB/SB)

	AM	NOON	PM
TEV	0	432	0
PHF		0.80	

SOUTHBOUND (Hillview Rd/I-80 EB Ramps)

AM	0	0	0	0	0	AM
NOON	101	6	3	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Ophir Rd/SR 193)

AM	NOON	PM
0	110	0
0	0	0
0	0	0
0	292	0
0	12	0

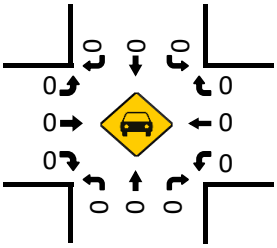
WESTBOUND (Ophir Rd/SR 193)

PM	NOON	AM
0	0	0
0	0	0
0	0	0
0	0	0
0	304	0

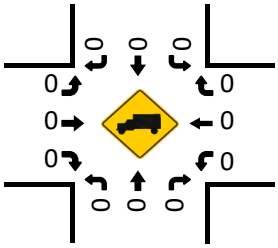
NORTHBOUND (Hillview Rd/I-80 EB Ramps)

PM	0	0	0	0	0	PM
NOON	18	0	9	0	9	NOON
AM	0	0	0	0	0	AM

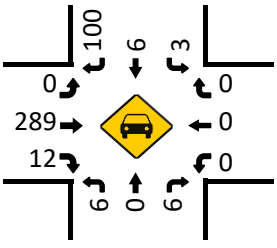
Cars (AM)



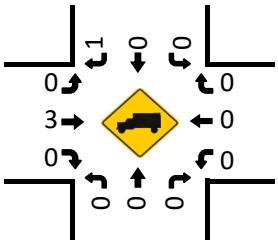
HT (AM)



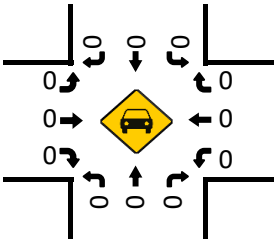
Cars (NOON)



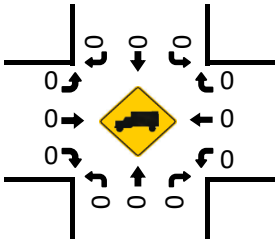
HT (NOON)



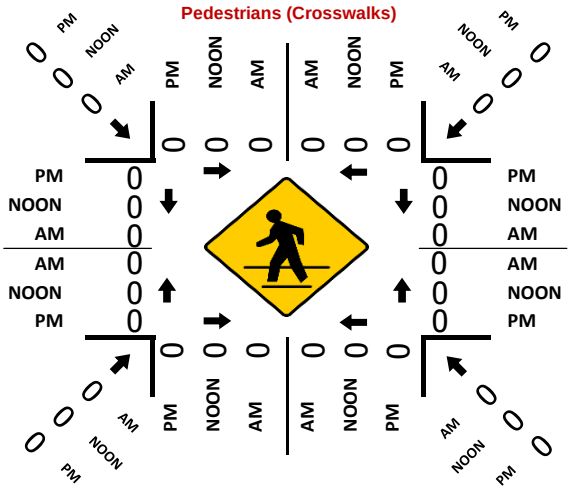
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/16/2021

Data - Total

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	1	0	5	0	0	2	24	0	0	65	4	0	0	0	0	0	101
11:45 AM	2	0	2	0	0	2	27	0	0	52	2	0	0	0	0	0	87
12:00 PM	3	0	3	0	0	1	21	0	0	73	4	0	0	0	0	0	105
12:15 PM	3	0	3	0	2	0	18	0	0	78	1	0	0	0	0	0	105
12:30 PM	1	0	1	0	1	3	35	0	0	89	5	0	0	0	0	0	135
12:45 PM	1	0	1	0	0	0	19	0	0	56	4	0	0	0	0	0	81
1:00 PM	3	0	3	0	1	0	14	0	0	58	0	0	0	0	0	0	79
1:15 PM	0	0	1	0	0	1	25	0	0	55	2	0	0	0	0	0	84
1:30 PM	1	0	0	0	0	0	13	0	0	73	1	0	0	0	0	0	88
1:45 PM	1	0	1	0	0	2	18	0	0	66	4	0	0	0	0	0	92
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	0	20	0	4	11	214	0	0	665	27	0	0	0	0	0	957
APPROACH %'s :	44.44%	0.00%	55.56%	0.00%	1.75%	4.80%	93.45%	0.00%	0.00%	96.10%	3.90%	0.00%					
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	9	0	9	0	3	6	101	0	0	292	12	0	0	0	0	0	432
PEAK HR FACTOR :	0.750	0.000	0.750	0.000	0.375	0.500	0.721	0.000	0.000	0.820	0.600	0.000	0.000	0.000	0.000	0.000	0.800
	0.750				0.705				0.809								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/16/2021

Data - Cars

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	1	0	5	0	0	2	24	0	0	60	4	0	0	0	0	0	96
11:45 AM	2	0	2	0	0	2	27	0	0	50	2	0	0	0	0	0	85
12:00 PM	3	0	3	0	0	1	20	0	0	73	4	0	0	0	0	0	104
12:15 PM	3	0	3	0	2	0	18	0	0	78	1	0	0	0	0	0	105
12:30 PM	1	0	1	0	1	3	35	0	0	88	5	0	0	0	0	0	134
12:45 PM	1	0	1	0	0	0	19	0	0	56	3	0	0	0	0	0	80
1:00 PM	2	0	3	0	1	0	14	0	0	57	0	0	0	0	0	0	77
1:15 PM	0	0	1	0	0	1	25	0	0	53	1	0	0	0	0	0	81
1:30 PM	1	0	0	0	0	0	13	0	0	73	1	0	0	0	0	0	88
1:45 PM	1	0	1	0	0	2	18	0	0	66	4	0	0	0	0	0	92
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	0	20	0	4	11	213	0	0	654	25	0	0	0	0	0	942
APPROACH %'s :	42.86%	0.00%	57.14%	0.00%	1.75%	4.82%	93.42%	0.00%	0.00%	96.32%	3.68%	0.00%					
PEAK HR :	**11:45 AM - 12:45 PM**																TOTAL
PEAK HR VOL :	9	0	9	0	3	6	100	0	0	289	12	0	0	0	0	0	428
PEAK HR FACTOR :	0.750	0.000	0.750	0.000	0.375	0.500	0.714	0.000	0.000	0.821	0.600	0.000	0.000	0.000	0.000	0.000	0.799
	0.750				0.699				0.809								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/16/2021

Data - HT

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
11:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:00 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	1	0	0	11	2	0	0	0	0	0	15
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	84.62%	15.38%	0.00%					
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.500
					0.250				0.375								

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle
Control: 2-Way Stop(NB/SB)

Project ID: 21-070180-010
Date: 10/16/2021

Data - Bikes

NS/EW Streets:	Hillview Rd/I-80 EB Ramps				Hillview Rd/I-80 EB Ramps				Ophir Rd/SR 193				Ophir Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services Intersection Turning Movement Count

Location: Hillview Rd/I-80 EB Ramps & Ophir Rd/SR 193
City: Newcastle

Project ID: 21-070180-010
Date: 10/16/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Hillview Rd/I-80 EB Ramps		Hillview Rd/I-80 EB Ramps		Ophir Rd/SR 193		Ophir Rd/SR 193		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

SR 193 & Taylor Rd/SR 193

Peak Hour Turning Movement Count

ID: 22-070051-001
City: Newcastle

Day: Saturday
Date: 3/26/2022

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:45 PM - 01:45 PM	11:30 AM - 02:00 PM
NONE	NONE

SR 193

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	2	1	2	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Taylor Rd/SR 193)

AM	NOON	PM	
0	124	0	⇦
0	0	0	↶ 0
0	1	0	↱ 0
0	146	0	→ 0
0	20	0	↷ 0
AM	NOON	PM	

WESTBOUND (Taylor Rd/SR 193)

PM	NOON	AM	
0	0	0	↶ 0
0	101	0	← 0
0	164	0	↰ 0
0	0	0	↷ 0
0	326	0	⇨
PM	NOON	AM	

CONTROL: 4-Way Stop

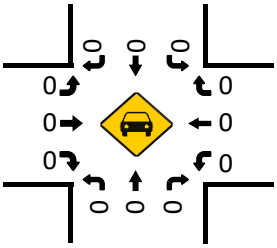
	AM	NOON	PM
TEV	0	636	0
PHF		0.89	

PM	0	0	0	0	0	PM
NOON	184	0	23	0	178	NOON
AM	0	0	0	0	0	AM

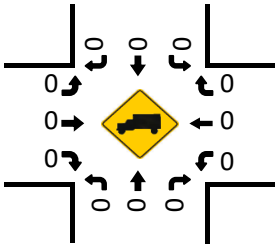
NORTHBOUND

SR 193

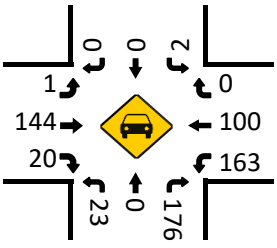
Cars (AM)



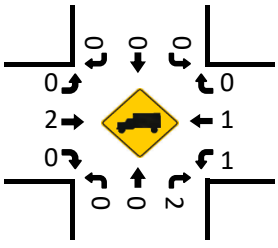
HT (AM)



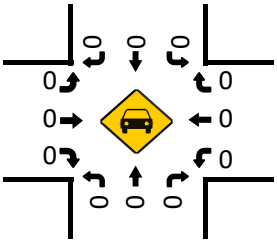
Cars (NOON)



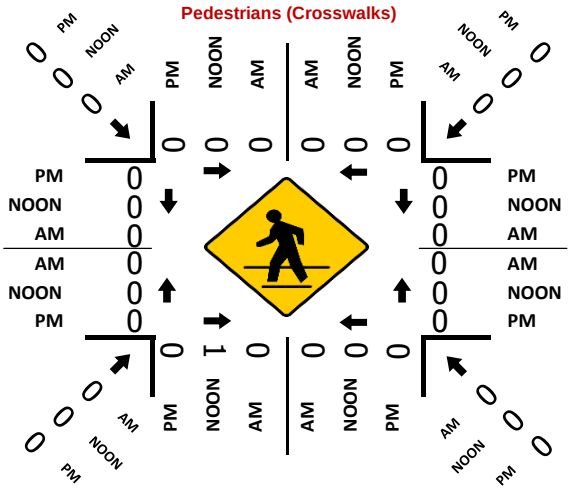
HT (NOON)



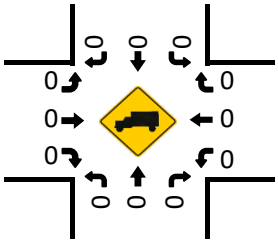
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/26/2022

Data - Total

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	4	0	47	0	1	0	0	0	0	30	4	0	31	25	0	0	142
11:45 AM	1	0	45	0	0	0	0	0	0	25	1	0	37	26	0	0	135
12:00 PM	1	0	38	0	0	0	0	0	0	31	4	0	54	22	0	0	150
12:15 PM	0	0	46	0	0	0	0	0	0	26	4	0	42	24	0	0	142
12:30 PM	6	0	40	0	0	0	0	0	0	33	3	0	49	27	0	0	158
12:45 PM	6	0	39	0	0	0	0	0	0	32	3	0	44	35	0	0	159
1:00 PM	5	0	41	0	0	0	0	0	0	26	6	0	35	19	0	0	132
1:15 PM	6	0	59	0	1	0	0	0	0	48	4	0	41	20	0	0	179
1:30 PM	6	0	39	0	1	0	0	1	1	40	7	0	44	27	0	0	166
1:45 PM	3	0	25	0	0	0	0	0	0	40	5	0	43	25	0	0	141
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	38	0	419	0	3	0	0	1	1	331	41	0	420	250	0	0	1504
APPROACH %'s :	8.32%	0.00%	91.68%	0.00%	75.00%	0.00%	0.00%	25.00%	0.27%	88.74%	10.99%	0.00%	62.69%	37.31%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	23	0	178	0	2	0	0	1	1	146	20	0	164	101	0	0	636
PEAK HR FACTOR :	0.958	0.000	0.754	0.000	0.500	0.000	0.000	0.250	0.250	0.760	0.714	0.000	0.932	0.721	0.000	0.000	0.888
	0.773				0.375				0.803				0.839				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/26/2022

Data - Cars

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	4	0	45	0	1	0	0	0	0	30	4	0	29	25	0	0	138
11:45 AM	1	0	45	0	0	0	0	0	0	25	1	0	37	26	0	0	135
12:00 PM	1	0	38	0	0	0	0	0	0	31	4	0	54	22	0	0	150
12:15 PM	0	0	45	0	0	0	0	0	0	26	4	0	42	23	0	0	140
12:30 PM	6	0	40	0	0	0	0	0	0	33	3	0	48	27	0	0	157
12:45 PM	6	0	38	0	0	0	0	0	0	31	3	0	43	35	0	0	156
1:00 PM	5	0	40	0	0	0	0	0	0	26	6	0	35	19	0	0	131
1:15 PM	6	0	59	0	1	0	0	0	0	47	4	0	41	19	0	0	177
1:30 PM	6	0	39	0	1	0	0	1	1	40	7	0	44	27	0	0	166
1:45 PM	3	0	24	0	0	0	0	0	0	40	5	0	43	25	0	0	140
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	38	0	413	0	3	0	0	1	1	329	41	0	416	248	0	0	1490
APPROACH %'s :	8.43%	0.00%	91.57%	0.00%	75.00%	0.00%	0.00%	25.00%	0.27%	88.68%	11.05%	0.00%	62.65%	37.35%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	23	0	176	0	2	0	0	1	1	144	20	0	163	100	0	0	630
PEAK HR FACTOR :	0.958	0.000	0.746	0.000	0.500	0.000	0.000	0.250	0.250	0.766	0.714	0.000	0.926	0.714	0.000	0.000	0.890
	0.765				0.375				0.809				0.843				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/26/2022

Data - HT

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	4
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	3
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	6	0	0	0	0	0	0	2	0	0	4	2	0	0	14
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	2	0	0	1	1	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.250	0.000	0.000	0.500
	0.500								0.500				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193
City: Newcastle
Control: 4-Way Stop

Project ID: 22-070051-001
Date: 3/26/2022

Data - Bikes

NS/EW Streets:	SR 193				SR 193				Taylor Rd/SR 193				Taylor Rd/SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	4	0	0	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	10
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	3	2	0	0	6
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
1:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	6	0	0	0	0	0	0	2	0	0	18	6	0	0	32
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	75.00%	25.00%	0.00%	0.00%	
PEAK HR :	12:45 PM - 01:45 PM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	0	0	0	5	2	0	0	9
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.250	0.000	0.000	0.375
	0.500												0.350				

National Data & Surveying Services Intersection Turning Movement Count

Location: SR 193 & Taylor Rd/SR 193 **Project ID:** 22-070051-001
City: Newcastle **Date:** 3/26/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	SR 193		SR 193		Taylor Rd/SR 193		Taylor Rd/SR 193		
NOON	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
11:30 AM	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	1	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	1
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	**12:00 AM - 01:00 AM**								TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :			0.250						0.250
			0.250						

Prepared by National Data & Surveying Services

VOLUME

Callison Rd Bet. Clark Tunnel Rd & Project Site Entrance

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	123	122	245

AM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0	
00:15					0		0		0	
00:30					0		0		0	
00:45					0		0		0	
01:00					0		0		0	
01:15					0		0		0	
01:30					0		0		0	
01:45					0		0		0	
02:00					0		0		0	
02:15					0		1		1	
02:30					0		0		0	
02:45					1	1	0	1	1	2
03:00					0		1		1	
03:15					0		0		0	
03:30					0		0		0	
03:45					0		0	1	0	1
04:00					0		0		0	
04:15					0		0		0	
04:30					0		0		0	
04:45					2	2	0		2	2
05:00					0		0		0	
05:15					0		0		0	
05:30					0		0		0	
05:45					0		1	1	1	1
06:00					1		1		2	
06:15					2		0		2	
06:30					1		1		2	
06:45					1	5	3	5	4	10
07:00					3		3		6	
07:15					0		2		2	
07:30					1		3		4	
07:45					4	8	1	9	5	17
08:00					5		6		11	
08:15					3		1		4	
08:30					1		6		7	
08:45					2	11	2	15	4	26
09:00					1		1		2	
09:15					1		1		2	
09:30					0		3		3	
09:45					2	4	4	9	6	13
10:00					3		1		4	
10:15					0		2		2	
10:30					2		1		3	
10:45					1	6	2	6	3	12
11:00					1		2		3	
11:15					1		0		1	
11:30					3		0		3	
11:45					3	8	4	6	7	14
TOTALS						45		53		98
SPLIT %						45.9%		54.1%		40.0%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					2		5		7	
12:15					2		0		2	
12:30					5		0		5	
12:45					0	9	2	7	2	16
13:00					1		0		1	
13:15					3		0		3	
13:30					5		1		6	
13:45					2	11	2	3	4	14
14:00					2		3		5	
14:15					2		3		5	
14:30					5		2		7	
14:45					1	10	1	9	2	19
15:00					2		4		6	
15:15					4		0		4	
15:30					1		4		5	
15:45					4	11	5	13	9	24
16:00					3		3		6	
16:15					5		3		8	
16:30					3		1		4	
16:45					1	12	6	13	7	25
17:00					4		1		5	
17:15					6		4		10	
17:30					1		8		9	
17:45					1	12	1	14	2	26
18:00					2		1		3	
18:15					0		0		0	
18:30					1		2		3	
18:45					1	4	0	3	1	7
19:00					1		1		2	
19:15					1		0		1	
19:30					0		0		0	
19:45					1	3	2	3	3	6
20:00					0		0		0	
20:15					0		1		1	
20:30					0		0		0	
20:45					1	1	0	1	1	2
21:00					0		0		0	
21:15					0		0		0	
21:30					0		0		0	
21:45					0		3	3	3	3
22:00					1		0		1	
22:15					1		0		1	
22:30					0		0		0	
22:45					1	3	0		1	3
23:00					2		0		2	
23:15					0		0		0	
23:30					0		0		0	
23:45					0	2	0		0	2
TOTALS						78		69		147
SPLIT %						53.1%		46.9%		60.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	123	122	245

AM Peak Hour	07:30	08:00	07:45	
AM Pk Volume	13	15	27	
Pk Hr Factor	0.650	0.625	0.614	
7 - 9 Volume	19	24	43	
7 - 9 Peak Hour	07:30	08:00	07:45	
7 - 9 Pk Volume	13	15	27	
Pk Hr Factor	0.650	0.625	0.614	

PM Peak Hour	15:45	16:45	16:45	
PM Pk Volume	15	19	31	
Pk Hr Factor	0.750	0.594	0.775	
4 - 6 Volume	24	27	51	
4 - 6 Peak Hour	16:30	16:45	16:45	
4 - 6 Pk Volume	14	19	31	
Pk Hr Factor	0.583	0.594	0.775	

Prepared by National Data & Surveying Services

VOLUME

Callison Rd Bet. Project Site Entrance & Taylor Rd

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	300	276	576

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			4	4	8
00:15			0	0	0	12:15			6	7	13
00:30			0	0	0	12:30			8	5	13
00:45			0	0	0	12:45			7	3	10
01:00			0	0	0	13:00			4	4	8
01:15			0	0	0	13:15			4	4	8
01:30			0	0	0	13:30			6	5	11
01:45			0	0	0	13:45			6	11	17
02:00			0	0	0	14:00			6	2	8
02:15			1	1	2	14:15			8	7	15
02:30			2	0	2	14:30			10	8	18
02:45			0	1	1	14:45			8	10	18
03:00			0	1	1	15:00			8	6	14
03:15			0	0	0	15:15			5	7	12
03:30			0	0	0	15:30			7	10	17
03:45			0	0	0	15:45			9	11	20
04:00			0	0	0	16:00			5	8	13
04:15			0	1	1	16:15			6	5	11
04:30			0	0	0	16:30			8	6	14
04:45			0	0	0	16:45			3	2	5
05:00			0	0	0	17:00			6	9	15
05:15			0	0	0	17:15			2	8	10
05:30			0	0	0	17:30			4	2	6
05:45			1	0	1	17:45			2	6	8
06:00			0	1	1	18:00			5	5	10
06:15			4	1	5	18:15			2	1	3
06:30			5	4	9	18:30			5	3	8
06:45			5	9	14	18:45			2	2	4
07:00			5	0	5	19:00			3	2	5
07:15			7	0	7	19:15			0	0	0
07:30			3	3	6	19:30			1	0	1
07:45			10	5	15	19:45			1	1	2
08:00			6	4	10	20:00			4	2	6
08:15			3	1	4	20:15			1	1	2
08:30			7	3	10	20:30			1	3	4
08:45			3	3	6	20:45			1	3	4
09:00			6	7	13	21:00			0	3	3
09:15			7	5	12	21:15			0	0	0
09:30			9	4	13	21:30			0	1	1
09:45			5	6	11	21:45			1	1	2
10:00			4	1	5	22:00			0	0	0
10:15			4	1	5	22:15			1	2	3
10:30			4	2	6	22:30			0	0	0
10:45			7	8	15	22:45			0	2	2
11:00			7	5	12	23:00			0	0	0
11:15			3	8	11	23:15			0	0	0
11:30			3	2	5	23:30			1	0	1
11:45			8	7	15	23:45			0	0	0
TOTALS			129	94	**223**	TOTALS			171	182	**353**
SPLIT %			57.8%	42.2%	**38.7%**	SPLIT %			48.4%	51.6%	**61.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	300	276	576

AM Peak Hour			09:00	10:30	**09:00**	PM Peak Hour			14:15	15:15	**14:15**
AM Pk Volume			27	23	**49**	PM Pk Volume			34	36	**65**
Pk Hr Factor			0.750	0.719	**0.942**	Pk Hr Factor			0.850	0.818	**0.903**
7 - 9 Volume	0	0	44	19	**63**	4 - 6 Volume	0	0	36	46	**82**
7 - 9 Peak Hour			07:15	07:30	**07:45**	4 - 6 Peak Hour			16:15	16:30	**16:15**
7 - 9 Pk Volume	0	0	26	13	**39**	4 - 6 Pk Volume	0	0	23	25	**45**
Pk Hr Factor	0.000	0.000	0.650	0.650	**0.650**	Pk Hr Factor	0.000	0.000	0.719	0.694	**0.750**

Prepared by National Data & Surveying Services

VOLUME

Clark Tunnel Rd Bet. Callison Rd & English Colony Rd

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_003

DAILY TOTALS	NB	SB	EB	WB	Total
	343	332	0	0	675

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		2						2	
00:45	0		0	2					0	2
01:00	0		1						1	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0	1					0	1
02:00	0		0						0	
02:15	1		0						1	
02:30	0		0						0	
02:45	0	1	1	1					1	2
03:00	1		0						1	
03:15	0		0						0	
03:30	0		0						0	
03:45	0	1	0						0	1
04:00	0		0						0	
04:15	0		0						0	
04:30	0		1						1	
04:45	0		3	4					3	4
05:00	0		0						0	
05:15	2		2						4	
05:30	0		1						1	
05:45	1	3	2	5					3	8
06:00	0		4						4	
06:15	0		2						2	
06:30	1		2						3	
06:45	8	9	5	13					13	22
07:00	4		4						8	
07:15	2		5						7	
07:30	2		5						7	
07:45	4	12	7	21					11	33
08:00	7		12						19	
08:15	6		11						17	
08:30	4		9						13	
08:45	6	23	4	36					10	59
09:00	1		8						9	
09:15	5		3						8	
09:30	3		5						8	
09:45	3	12	0	16					3	28
10:00	1		5						6	
10:15	2		3						5	
10:30	2		4						6	
10:45	4	9	3	15					7	24
11:00	3		2						5	
11:15	1		2						3	
11:30	6		10						16	
11:45	9	19	9	23					18	42
TOTALS		89		137						**226**
SPLIT %		39.4%		60.6%						**33.5%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	6		4						10	
12:15	4		7						11	
12:30	3		7						10	
12:45	5	18	2	20					7	38
13:00	13		5						18	
13:15	5		6						11	
13:30	6		3						9	
13:45	5	29	4	18					9	47
14:00	11		11						22	
14:15	3		10						13	
14:30	11		10						21	
14:45	7	32	6	37					13	69
15:00	13		7						20	
15:15	6		9						15	
15:30	8		6						14	
15:45	4	31	9	31					13	62
16:00	7		7						14	
16:15	9		11						20	
16:30	6		6						12	
16:45	11	33	3	27					14	60
17:00	12		7						19	
17:15	5		3						8	
17:30	18		8						26	
17:45	11	46	6	24					17	70
18:00	4		3						7	
18:15	7		1						8	
18:30	11		5						16	
18:45	4	26	4	13					8	39
19:00	2		1						3	
19:15	3		2						5	
19:30	4		4						8	
19:45	6	15	0	7					6	22
20:00	3		0						3	
20:15	3		1						4	
20:30	1		2						3	
20:45	3	10	0	3					3	13
21:00	1		1						2	
21:15	1		0						1	
21:30	2		3						5	
21:45	4	8	4	8					8	16
22:00	3		1						4	
22:15	1		1						2	
22:30	2		0						2	
22:45	0	6	2	4					2	10
23:00	0		3						3	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0	3					0	3
TOTALS		254		195						**449**
SPLIT %		56.6%		43.4%						**66.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	343	332	0	0	675

AM Peak Hour	11:30	07:45			**07:45**
AM Pk Volume	25	39			**60**
Pk Hr Factor	0.694	0.813			**0.789**
7 - 9 Volume	35	57	0	0	**92**
7 - 9 Peak Hour	08:00	07:45			**07:45**
7 - 9 Pk Volume	23	39	0	0	**60**
Pk Hr Factor	0.821	0.813	0.000	0.000	**0.789**

PM Peak Hour	16:45	14:00			**17:00**
PM Pk Volume	46	37			**70**
Pk Hr Factor	0.639	0.841			**0.673**
4 - 6 Volume	79	51	0	0	**130**
4 - 6 Peak Hour	16:45	16:00			**17:00**
4 - 6 Pk Volume	46	27	0	0	**70**
Pk Hr Factor	0.639	0.614	0.000	0.000	**0.673**

Prepared by National Data & Surveying Services

VOLUME

Sisley Rd Bet. Callison Rd & Taylor Rd

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_004

DAILY TOTALS	NB	SB	EB	WB	Total
	107	86	0	0	193

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		1	1					1	1
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		1	1					1	1
05:00	0		0						0	
05:15	0		0						0	
05:30	0		1						1	
05:45	0		0	1					0	1
06:00	0		0						0	
06:15	1		2						3	
06:30	0		0						0	
06:45	1	2	2	4					3	6
07:00	0		2						2	
07:15	0		2						2	
07:30	1		2						3	
07:45	0	1	2	8					2	9
08:00	2		1						3	
08:15	0		0						0	
08:30	2		3						5	
08:45	1	5	2	6					3	11
09:00	0		3						3	
09:15	2		1						3	
09:30	0		0						0	
09:45	2	4	1	5					3	9
10:00	1		1						2	
10:15	0		1						1	
10:30	1		2						3	
10:45	2	4	1	5					3	9
11:00	2		3						5	
11:15	2		0						2	
11:30	4		2						6	
11:45	5	13	3	8					8	21
TOTALS		29		39						**68**
SPLIT %		42.6%		57.4%						**35.2%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	2		1						3	
12:15	3		1						4	
12:30	1		1						2	
12:45	2	8	2	5					4	13
13:00	1		2						3	
13:15	4		1						5	
13:30	2		1						3	
13:45	0	7	1	5					1	12
14:00	1		1						2	
14:15	3		1						4	
14:30	5		2						7	
14:45	1	10	1	5					2	15
15:00	3		1						4	
15:15	4		1						5	
15:30	0		3						3	
15:45	4	11	2	7					6	18
16:00	2		3						5	
16:15	2		0						2	
16:30	0		1						1	
16:45	3	7	0	4					3	11
17:00	5		3						8	
17:15	1		2						3	
17:30	2		2						4	
17:45	3	11	1	8					4	19
18:00	2		1						3	
18:15	0		2						2	
18:30	2		1						3	
18:45	4	8	2	6					6	14
19:00	0		0						0	
19:15	2		0						2	
19:30	3		0						3	
19:45	1	6	2	2					3	8
20:00	1		3						4	
20:15	2		0						2	
20:30	1		0						1	
20:45	2	6	0	3					2	9
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	1	1	1	1					2	2
22:00	1		0						1	
22:15	1		1						2	
22:30	0		0						0	
22:45	0	2	0	1					0	3
23:00	1		0						1	
23:15	0		0						0	
23:30	0		0						0	
23:45	0	1	0						0	1
TOTALS		78		47						**125**
SPLIT %		62.4%		37.6%						**64.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	107	86	0	0	193

AM Peak Hour	11:30	08:30			**11:00**
AM Pk Volume	14	9			**21**
Pk Hr Factor	0.700	0.750			**0.656**
7 - 9 Volume	6	14	0	0	**20**
7 - 9 Peak Hour	08:00	07:00			**08:00**
7 - 9 Pk Volume	5	8	0	0	**11**
Pk Hr Factor	0.625	1.000	0.000	0.000	**0.550**

PM Peak Hour	14:30	15:15			**15:15**
PM Pk Volume	13	9			**19**
Pk Hr Factor	0.650	0.750			**0.792**
4 - 6 Volume	18	12	0	0	**30**
4 - 6 Peak Hour	16:45	17:00			**17:00**
4 - 6 Pk Volume	11	8	0	0	**19**
Pk Hr Factor	0.550	0.667	0.000	0.000	**0.594**

Prepared by National Data & Surveying Services

VOLUME

Taylor Rd Bet. Callison Rd & Old State Hwy

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_005

DAILY TOTALS	NB	SB	EB	WB	Total
	2,923	1,736	0	0	4,659

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	1		0				1		12:00	38		24				62	
00:15	1		0				1		12:15	29		36				65	
00:30	3		0				3		12:30	43		30				73	
00:45	3	8	1	1			4	9	12:45	45	155	29	119			74	274
01:00	1		0				1		13:00	34		23				57	
01:15	1		1				2		13:15	50		40				90	
01:30	0		0				0		13:30	44		35				79	
01:45	1	3	1	2			2	5	13:45	45	173	42	140			87	313
02:00	1		0				1		14:00	56		38				94	
02:15	1		0				1		14:15	61		55				116	
02:30	3		0				3		14:30	64		59				123	
02:45	1	6	0				1	6	14:45	65	246	69	221			134	467
03:00	0		0				0		15:00	161		42				203	
03:15	1		0				1		15:15	169		36				205	
03:30	0		0				0		15:30	138		35				173	
03:45	1	2	1	1			2	3	15:45	84	552	42	155			126	707
04:00	1		1				2		16:00	67		44				111	
04:15	0		0				0		16:15	74		43				117	
04:30	1		3				4		16:30	82		39				121	
04:45	3	5	1	5			4	10	16:45	70	293	51	177			121	470
05:00	1		1				2		17:00	68		53				121	
05:15	1		1				2		17:15	56		45				101	
05:30	11		4				15		17:30	59		32				91	
05:45	7	20	3	9			10	29	17:45	56	239	27	157			83	396
06:00	11		6				17		18:00	36		28				64	
06:15	17		12				29		18:15	39		14				53	
06:30	19		11				30		18:30	19		17				36	
06:45	28	75	17	46			45	121	18:45	25	119	18	77			43	196
07:00	33		24				57		19:00	32		10				42	
07:15	38		44				82		19:15	24		8				32	
07:30	54		56				110		19:30	23		7				30	
07:45	70	195	31	155			101	350	19:45	22	101	7	32			29	133
08:00	36		25				61		20:00	20		10				30	
08:15	43		22				65		20:15	12		4				16	
08:30	41		23				64		20:30	14		8				22	
08:45	38	158	29	99			67	257	20:45	7	53	7	29			14	82
09:00	41		23				64		21:00	11		5				16	
09:15	28		27				55		21:15	13		3				16	
09:30	39		24				63		21:30	7		0				7	
09:45	34	142	18	92			52	234	21:45	12	43	2	10			14	53
10:00	34		23				57		22:00	5		0				5	
10:15	33		18				51		22:15	8		4				12	
10:30	39		26				65		22:30	2		3				5	
10:45	37	143	24	91			61	234	22:45	3	18	6	13			9	31
11:00	44		21				65		23:00	4		2				6	
11:15	39		30				69		23:15	3		2				5	
11:30	28		18				46		23:30	5		7				12	
11:45	47	158	25	94			72	252	23:45	4	16	0	11			4	27
TOTALS		915		595				**1510**	**TOTALS**		2008		1141				**3149**
SPLIT %		60.6%		39.4%				**32.4%**	**SPLIT %**		63.8%		36.2%				**67.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	2,923	1,736	0	0	4,659

AM Peak Hour	07:30	07:15				**07:15**	**PM Peak Hour**	15:00	14:15				**14:45**
AM Pk Volume	203	156				**354**	**PM Pk Volume**	552	225				**715**
Pk Hr Factor	0.725	0.696				**0.805**	**Pk Hr Factor**	0.817	0.815				**0.872**
7 - 9 Volume	353	254	0	0		**607**	**4 - 6 Volume**	532	334	0	0		**866**
7 - 9 Peak Hour	07:30	07:15				**07:15**	**4 - 6 Peak Hour**	16:15	16:30				**16:15**
7 - 9 Pk Volume	203	156	0	0		**354**	**4 - 6 Pk Volume**	294	188	0	0		**480**
Pk Hr Factor	0.725	0.696	0.000	0.000		**0.805**	**Pk Hr Factor**	0.896	0.887	0.000	0.000		**0.992**

Prepared by National Data & Surveying Services

VOLUME

Taylor Rd Bet. English Colony Way & Callison Rd

Day: Thursday
Date: 10/14/2021

City: Penryn
Project #: CA21_070179_006

DAILY TOTALS	NB	SB	EB	WB	Total
	2,958	2,366	0	0	5,324

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	2		1				3		12:00	37		27				64	
00:15	1		1				2		12:15	37		42				79	
00:30	3		0				3		12:30	44		36				80	
00:45	4	10	2	4			6	14	12:45	39	157	31	136			70	293
01:00	0		0				0		13:00	37		24				61	
01:15	1		2				3		13:15	42		36				78	
01:30	0		0				0		13:30	47		41				88	
01:45	2	3	0	2			2	5	13:45	43	169	41	142			84	311
02:00	1		1				2		14:00	62		45				107	
02:15	0		0				0		14:15	64		59				123	
02:30	1		1				2		14:30	61		63				124	
02:45	1	3	0	2			1	5	14:45	81	268	69	236			150	504
03:00	1		0				1		15:00	166		47				213	
03:15	0		0				0		15:15	180		49				229	
03:30	0		0				0		15:30	139		45				184	
03:45	1	2	1	1			2	3	15:45	82	567	40	181			122	748
04:00	1		2				3		16:00	70		44				114	
04:15	2		2				4		16:15	77		53				130	
04:30	0		6				6		16:30	79		55				134	
04:45	2	5	5	15			7	20	16:45	68	294	60	212			128	506
05:00	1		5				6		17:00	65		52				117	
05:15	2		6				8		17:15	59		47				106	
05:30	9		11				20		17:30	62		44				106	
05:45	8	20	10	32			18	52	17:45	58	244	38	181			96	425
06:00	9		11				20		18:00	39		37				76	
06:15	12		25				37		18:15	42		27				69	
06:30	20		27				47		18:30	20		25				45	
06:45	32	73	27	90			59	163	18:45	32	133	26	115			58	248
07:00	30		42				72		19:00	32		13				45	
07:15	29		77				106		19:15	26		16				42	
07:30	57		95				152		19:30	28		10				38	
07:45	64	180	56	270			120	450	19:45	21	107	9	48			30	155
08:00	32		53				85		20:00	15		17				32	
08:15	47		42				89		20:15	12		9				21	
08:30	34		39				73		20:30	18		11				29	
08:45	37	150	47	181			84	331	20:45	6	51	12	49			18	100
09:00	35		36				71		21:00	19		9				28	
09:15	31		34				65		21:15	14		6				20	
09:30	43		36				79		21:30	9		1				10	
09:45	31	140	33	139			64	279	21:45	10	52	3	19			13	71
10:00	29		41				70		22:00	9		5				14	
10:15	27		35				62		22:15	11		8				19	
10:30	41		37				78		22:30	2		6				8	
10:45	39	136	41	154			80	290	22:45	4	26	6	25			10	51
11:00	42		25				67		23:00	3		2				5	
11:15	35		38				73		23:15	4		1				5	
11:30	30		28				58		23:30	4		6				10	
11:45	47	154	31	122			78	276	23:45	3	14	1	10			4	24
TOTALS		876		1012				**1888**	**TOTALS**		2082		1354				**3436**
SPLIT %		46.4%		53.6%				**35.5%**	**SPLIT %**		60.6%		39.4%				**64.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	2,958	2,366	0	0	5,324

AM Peak Hour	07:30	07:15				**07:15**	**PM Peak Hour**	15:00	14:15				**14:45**
AM Pk Volume	200	281				**463**	**PM Pk Volume**	567	238				**776**
Pk Hr Factor	0.781	0.739				**0.762**	**Pk Hr Factor**	0.788	0.862				**0.847**
7 - 9 Volume	330	451	0	0		**781**	**4 - 6 Volume**	538	393	0	0		**931**
7 - 9 Peak Hour	07:30	07:15				**07:15**	**4 - 6 Peak Hour**	16:00	16:15				**16:15**
7 - 9 Pk Volume	200	281	0	0		**463**	**4 - 6 Pk Volume**	294	220	0	0		**509**
Pk Hr Factor	0.781	0.739	0.000	0.000		**0.762**	**Pk Hr Factor**	0.930	0.917	0.000	0.000		**0.950**