El Dorado County
Planning Services Department

Rancho Victoria Subdivision Project

Initial Study/Mitigated Negative Declaration

March 2026

Prepared by

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TABLE OF CONTENTS

A. PROJECT SUMMARY 1

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED 2

C. SOURCES 3

D. DETERMINATION 5

E. BACKGROUND AND INTRODUCTION 6

F. PROJECT DESCRIPTION 6

G. ENVIRONMENTAL CHECKLIST 11

I. AESTHETICS. 13
II. AGRICULTURE AND FOREST RESOURCES. 16
III. AIR QUALITY. 18
IV. BIOLOGICAL RESOURCES. 26
V. CULTURAL RESOURCES. 42
VI. ENERGY. 45
VII. GEOLOGY AND SOILS. 49
VIII. GREENHOUSE GAS EMISSIONS. 54
IX. HAZARDS AND HAZARDOUS MATERIALS. 63
X. HYDROLOGY AND WATER QUALITY. 66
XI. LAND USE AND PLANNING. 71
XII. MINERAL RESOURCES. 72
XIII. NOISE. 73
XIV. POPULATION AND HOUSING. 81
XV. PUBLIC SERVICES. 82
XVI. RECREATION. 85
XVII. TRANSPORTATION. 86
XVIII. TRIBAL CULTURAL RESOURCES. 89
XIX. UTILITIES AND SERVICE SYSTEMS. 94
XX. WILDFIRE. 97
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. 102

Appendices

Appendix A: Air Quality and GHG Modeling Results
Appendix B: Biological Assessment
Appendix C: Aquatic Resources Delineation
Appendix D: Wetland and Permit Review
Appendix E: Oak Woodlands Assessment
Appendix F: Geotechnical Feasibility Study
Appendix G: On-Site Sewage Disposal Study
Appendix H: Environmental Noise Assessment
Appendix I: Wildland Fire Safe Plan

INITIAL STUDY
MARCH 2026

A. PROJECT SUMMARY

1. Project Title: Rancho Victoria Subdivision Project

2. Lead Agency Name and Address: El Dorado County
Planning Services Department
2850 Fairlane Court
Placerville, CA 95667

3. Contact Person and Phone Number: Bianca Dinkler
Project Planner
(530) 621-5355

4. Project Location: Approximately 0.73-mile northwest of the Latrobe Road/South Shingle Road intersection
Shingle Springs, CA 95682
APN 087-010-043

5. Project Sponsor's Name and Address: Jeff Kovach
Bevier Structural Engineering
2479 Sunrise Boulevard.
Gold River, CA 95670

6. Existing General Plan Designation: Rural Residential (RR)

7. Existing Zoning Designation: Rural Land, Forty-acres (RL-40)

8. Surrounding Land Uses and Setting:

The 513.93-acre project site is located approximately 0.73-mile northwest of the Latrobe Road/South Shingle Road intersection in unincorporated El Dorado County, California and is identified by Assessor's Parcel Number (APN) 087-010-043. The project site consists of rolling topography featuring a mosaic of grassland areas, oak woodlands, and seasonal drainages that trend eastward towards Latrobe Road and lack water until the winter and early spring. The project site contains an existing single-family residence and two ancillary structures and is otherwise undeveloped. Approximately 149 acres of oak woodland habitat are located along the site's eastern boundary located off Victoria Way; 122.5 acres of the oak woodland habitat are within the Oak Preservation Area that bisects the eastern portion of the site from north to south. Surrounding existing uses include undeveloped land and oak woodland the north; the El Dorado Trail Access Point, Latrobe Cemetery, and undeveloped land to the east; single-family residences and El Dorado Hills Fire Station 91 further east, across Latrobe Road; single-family residences and Millers Hill School to the south; and single-family residences and undeveloped land to the west. The El Dorado County General Plan designates the project site as RR and the site is zoned RL-40.

9. Project Description Summary:

The Rancho Victoria Subdivision Project (proposed project) would include subdivision of the 513.93-acre project site into eight parcels ranging in size from 40 acres to 219.58 acres. Although development of residential uses within the project site is not currently proposed at this time, it is anticipated that future development would include the construction of one single-family residence within seven of the proposed parcels; the existing ancillary structures and the single-family residence on the eighth parcel would be retained. The seven new single-family residences anticipated to be developed on-site would be served by new individual wells for both potable and emergency water services and private, on-site septic systems. Approximately 149 acres of the on-site oak woodland habitat would be preserved. Access to the project site would be provided from Victoria Way to the south and from Settler's Trail to the west. The proposed project would require approval of a Tentative Subdivision Map.

10. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

At the time of application submittal, seven Tribes requested to be notified of proposed projects in El Dorado County: Ione Band of Miwok Indians, Nashville-El Dorado Miwok, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community (UAIC), Washoe Tribe of Nevada and California, and Wilton Rancheria. In compliance with Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1), the Tribes were notified of the proposed project by certified mail on March 27, 2023. While the Shingle Springs Band of Miwok Indians did not request consultation, both UAIC and Wilton Rancheria responded with requests for consultation on March 27, 2023 and April 3, 2023, respectively. Both UAIC and Wilton Rancheria requested on-site surveys and provided recommendations on the treatment of on-site tribal cultural resources, which are incorporated as mitigation in this IS/MND. Upon approval of the proposed mitigation, both UAIC and Wilton Rancheria concluded consultation.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

✖ **Aesthetics**	☐ **Agriculture and Forest Resources**	☐ **Air Quality**
✖ **Biological Resources**	✖ **Cultural Resources**	☐ **Energy**
✖ **Geology and Soils**	✖ **Greenhouse Gas Emissions**	☐ **Hazards and Hazardous Materials**
✖ **Hydrology and Water Quality**	☐ **Land Use and Planning**	☐ **Mineral Resources**
✖ **Noise**	☐ **Population and Housing**	☐ **Public Services**
☐ **Recreation**	☐ **Transportation**	✖ **Tribal Cultural Resources**
☐ **Utilities and Service Systems**	✖ **Wildfire**	☐ **Mandatory Findings of Significance**

C. SOURCES

The following documents are referenced information sources used for the purposes of this Initial Study/Mitigated Negative Declaration (IS/MND):

1. Bianca Dinkler, Project Planner, El Dorado County Planning Department. Personal communication [letter] with Bryan Vyverberg, Supervising R.E.H.S., El Dorado County Environmental Health Department. June 10, 2024.
2. Bianca Dinkler, Project Planner, El Dorado County Planning Department. Personal communication [letter] with Chrishana Fields, Fire Marshal, El Dorado Hills Fire Department. April 27, 2023.
3. California Air Resources Board. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022.
4. California Air Resources Board. *The 2022 Climate Change Scoping Plan Update*. September 21, 2022.
5. California Building Standards Commission. *2022 California Green Building Standards Code*. 2023.
6. California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed May 2025.
7. California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/. Accessed August 2025.
8. California Department of Forestry and Fire Protection. *FHSZ Viewer.* Available at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed August 2025.
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11. California Department of Transportation. *California Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed May 2025.
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13. Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed August 2025.
14. El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*. February 2002.
15. El Dorado County. *2004 El Dorado County General Plan*. Adopted July 19, 2004. Amended May 21, 2024.
16. El Dorado County Community Development Agency, Environmental Management Division. *Well Completion Report*. May 10, 2024.
17. Federal Emergency Management Agency. *Flood Insurance Rate Maps 06017C0950E and 06017C0975E*. Available at: https://msc.fema.gov/portal/search?AddressQuery=Latrobe%2C%20CA. Accessed August 2025.

18. Foothill Resource Management. *Dynamic Trades, Inc. property, APN 087-010-043*. November 18, 2021.
19. Foothill Resource Management. *Rancho Victoria Subdivision Wildland Fire Safe Plan*. September 4, 2024.
20. Historic Resource Associates. *Ben Bolt Ridge TCP Study and Site Record*. August 12, 2025.
21. Historic Research Associates. *Cultural Resources Study: Dynamic Trades Parcel Split Project.* December 2021.
22. Latrobe School District. *Collection and Accounting for Developer Fees*. November 19, 2024.
23. Moore Biological Consultants. *"Rancho Victoria Tentative Map" (TM22-0004), El Dorado County, California: Clear-Span Creek Crossings Wetland and Permit Review.* March 17, 2025.
24. Moore Biological Consultants. *294+/- Acre "Victoria Way" Site, El Dorado County, California: Biological Assessment.* September 1, 2022.
25. Moore Biological Consultants. *Routine Wetland Delineation: 294+/- Acre "Victoria Way" Site, El Dorado County, California.* August 2022.
26. Rania Serieh, Air Quality Engineer at El Dorado County Air Pollution Control District. Personal Communication [phone] with Briette Shea, Associate/Air Quality Technician at Raney Planning & Management, Inc. October 22, 2020; Personal Communication [email] with Karen Huss, Air Quality Specialist at Raney Planning & Management, Inc. August 31, 2023.
27. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 6: Greenhouse Gas Emissions.* February 2021.
28. Saxelby Acoustics. *Environmental Noise Assessment Latrobe Road Subdivision Project, El Dorado County, California.* January 28, 2022.
29. State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento#. Accessed August 2025.
30. U.S. Census Bureau. *El Dorado County, California*. Available at: https://data.census.gov/profile/El_Dorado_County,_California?g=050XX00US06017#families-and-living-arrangements. Accessed September 2025.
31. Wheeldon Geology. *Onsite Sewage Disposal Study for the Proposed Rancho Victoria Subdivision*. December 13, 2007.
32. Youngdahl Consulting Group, Inc. *Geotechnical Feasibility Study For Rancho Victoria Subdivision – 4250 Victoria Way Shingle Springs, California.* March 2022.

D. DETERMINATION

On the basis of this IS/MND:

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

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

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

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

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

Signature	Date
Bianca Dinkler, Project Planner	El Dorado County
Printed Name	For

E. BACKGROUND AND INTRODUCTION

This IS/MND identifies and analyzes the potential environmental impacts of the proposed project. The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines.

On July 19, 2004, the El Dorado County Board of Supervisors adopted the El Dorado County General Plan and certified an associated Environmental Impact Report (EIR).[1] The most recent amendment to the General Plan was adopted on May 21, 2024. The General Plan EIR analyzed the potential impacts associated with full buildout of the General Plan planning area. Pursuant to Section 15152 of the CEQA Guidelines, a project that is consistent with the General Plan and zoning designations of the County may tier from the analysis contained in the General Plan EIR, incorporating by reference the general discussions from the broader EIR. The proposed project would be consistent with the project site's RR designation and RL-40 zoning; therefore, in accordance with Section 15152 of the CEQA Guidelines, the analysis within this IS/MND may tier off the analysis included in the General Plan EIR, as applicable.

In addition, project-specific technical reports have been prepared for the proposed project and form the basis of several technical sections of this IS/MND. Technical reports used in the preparation of this IS/MND are attached as appendices and/or available upon request at the El Dorado County Planning Division.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary actions required for the project.

Project Location and Setting

The 513.93-acre project site, identified by APN 087-010-043, is located approximately 0.73-mile northwest of the intersection Latrobe Road/South Shingle Road in unincorporated El Dorado County, California (see Figure 1 and Figure 2). The project site consists of rolling topography featuring a mosaic of grassland areas, oak woodlands, and wetlands consisting of six intermittent creeks, eight ephemeral creeks, 12 seeps, and a stock pond. The project site contains an existing single-family residence and two ancillary structures and is otherwise undeveloped. With respect to the on-site oak woodlands, approximately 149 acres of oak woodland habitat are located along the site's eastern boundary located off Victoria Way; 122.5 acres of the oak woodland habitat are within an Oak Preservation Area that bisects the eastern portion of the site from north to south. The Oak Preservation Area on the site is part of the "Preserve Area" identified pursuant to the Declaration of Restrictions for Oak Woodland Habitat Preservation filed by previous property owner, Bryte Gardens Associates, LTD., with the County on March 24, 2017, which requires the land to be preserved in its natural state in perpetuity as a covenant running with the land.

Surrounding existing uses include undeveloped land and oak woodland the north; the El Dorado Trail Access Point, Latrobe Cemetery, and undeveloped land to the east; single-family residences and El Dorado Hills Fire Station 91 further east, across Latrobe Road; single-family residences and Millers Hill School to the south; and single-family residences and undeveloped land to the west. The El Dorado County General Plan designates the site as RR and the site is zoned RL-40.

[1] El Dorado County. *2004 El Dorado County General Plan*. Adopted July 19, 2004.

Figure 1
Regional Project Location

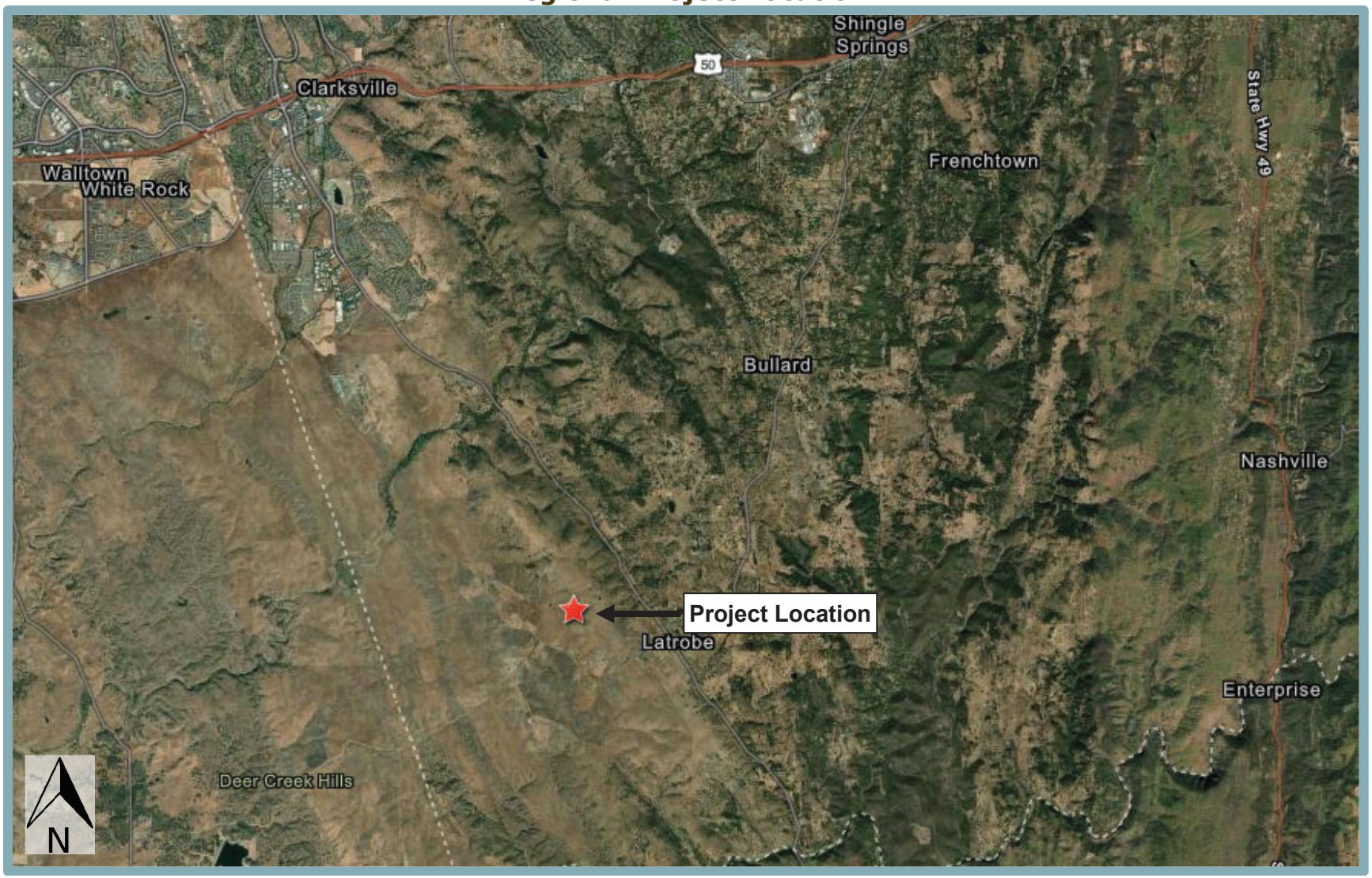


Figure 2
Project Site Boundaries

*Figure not OCR compatible.

Project Components

The proposed project would include a Tentative Subdivision Map to subdivide the project site into eight parcels, seven of which are anticipated to be developed with new single-family residences in the future; the existing single-family residence within the eighth parcel would be retained.

While development is not proposed at this time, CEQA requires that the project description for an environmental document include later phases or activities of a project that will foreseeably result from project approval (Section 15126). In *Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1988) 47 C3d 376, the court determined that CEQA review must include analysis of the environmental effects of future actions if 1) it is a reasonably foreseeable consequence of the initial project, and 2) the future action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.

It is reasonable to assume that on-site home development and utility installation will occur if the Tentative Subdivision Map is approved by the County, and the construction of homes will require additional earthwork that will change the scope of environmental effects. Thus, this environmental document will evaluate both the proposed subdivision of the 513.93-acre project site into eight parcels and subsequent potential development of single-family homes and associated utilities (new water wells and septic systems), on seven of the proposed parcels. The project components are described further below.

Tentative Subdivision Map

The proposed project would include a Tentative Subdivision Map to subdivide the project site into eight parcels (see Figure 3). As summarized in Table 1, following the proposed subdivision, the new parcels (i.e., Parcels A-1 through A-8) would range in size from 40 acres to 219.58 acres.

Table 1
Tentative Subdivision Map Parcel Acreages

Parcel Number	Acreage
A-1	40
A-2	40.17
A-3	54.18
A-4	40
A-5	219.58
A-6	40
A-7	40
A-8	40

Although development of the project site is not currently proposed, the proposed project is reasonably assumed to facilitate future development of seven of the proposed parcels in accordance with the project site's RR General Plan land use designation and RL-40 zoning. Development is not anticipated to occur within Parcel A-5, and the existing single-family residence and associated ancillary structures on Parcel A-5 would be retained. Typical uses allowed within the RR designation include single-family residences with an allowable residential density of one dwelling unit per 10 to 160 acres. Each of the proposed parcels, with the exception of Parcel A-5, which contains an existing residence, is anticipated to be developed with a single-family residence. As such, future development of the site is anticipated to include the addition of seven new on-site single-family units, for a total of eight on-site single-family residences. The prospective residential structure footprint ("pad") is shown for each parcel on see Figure 3.

Figure 3
Tentative Subdivision Map

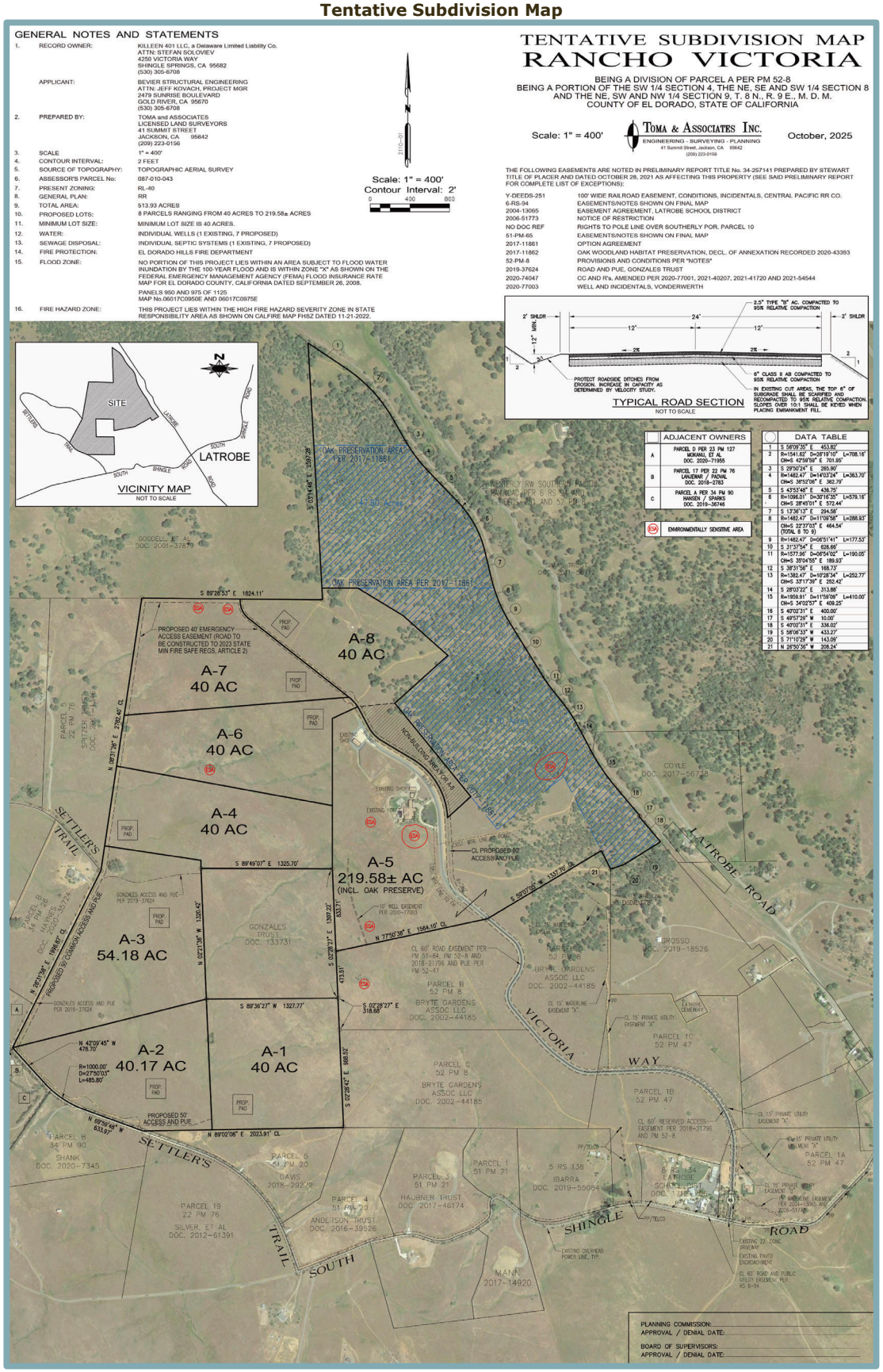


*Figure not OCR compatible.

Approximately 149 acres of on-site oak woodland habitat within Parcel A-5 would be preserved as part of the proposed project, as a covenant running with the land pursuant to the 2017 Declaration of Restrictions for Oak Woodland Habitat Preservation. In addition, as discussed in further detail in Section V, Cultural Resources, and Section XVIII, Tribal Cultural Resources, of this IS/MND, the proposed project would be required to preserve and deed-restrict in perpetuity non-disturbance areas for all previously recorded and newly identified cultural and tribal cultural resources, as well as a 100-foot buffer around each, as identified on the Tentative Subdivision Map prepared for the proposed project (see Figure 3, ESAs, or Environmentally Sensitive Areas).

Access, Circulation, and Parking

As part of future development that would be facilitated by the proposed project, access to Parcels A-5, A-6, A-7 and A-8 would be provided by Victoria Way. Victoria Way currently grants access to the existing single-family residence within Parcel A-5; the roadway would be extended north a short distance to give access to the other aforementioned parcels, ending in a cul-de-sac. Beyond the cul-de-sac, an emergency vehicle access (EVA) route would extend to the site's northern boundary, where an EVA route would connect to a new roadway along the site's western boundary within a 50-foot-wide common access and public utility easement (PUE) that would connect to Settler's Trail. The new 50-foot-wide common access and PUE along the western site boundary would consist of two 12-foot-wide paved travel lanes and provide access to Parcels A-3 and A-4. The new access would clear span two existing intermittent creek crossings, one located near the middle of Parcel A-3 and the other near the northern portion of Parcel A-4. Another proposed 50-foot-wide access and PUE would be provided from Settler's Trail to Parcel A-1, within and along the southern boundary of Parcel A-2, providing access to Parcel A-1. The proposed access would clear span an existing intermittent creek located between Parcels A-1 and A-2. Access to Parcel A-2 would be provided either directly from Settler's Trail or from the aforementioned 50-foot access and PUE. The proposed project would also realign a portion of Victoria Way in the proximity of the existing single-family residence within Parcel A-5; the realigned portion of Victoria Way would be constructed to include two 12-foot-wide paved travel lanes, consistent with the dimensions of the existing roadway. In addition to the above improvements, the proposed project would include the widening of South Shingle Road from approximately 20 feet to a paved width of 24 feet, plus two-foot gravel shoulders on either side of the roadway, between Latrobe Road and Victoria Way. The proposed project would also include the widening of Settler's Trail from approximately 18 feet to 20 feet in the site vicinity.

Utilities

Installation of new utility infrastructure is not included as part of the proposed project. However, future development of the undeveloped parcels would require installation of new water wells for both potable and emergency water services and private, on-site septic systems, with the exception of Parcel A-5, which is already developed with an existing residence, well, and septic system. With respect to storm drainage services, new impervious surfaces in each individual parcel would sheet flow to adjacent vegetated areas.

Subsequent to development of the proposed parcels, electrical service would be provided to each new residence through new connections to existing aboveground utility lines within the project vicinity that are owned by Pacific Gas and Electric Company (PG&E).

Discretionary Actions

The proposed project would require the following approvals from El Dorado County:

- Adoption of the IS/MND;

- Approval of a Mitigation Monitoring and Reporting Program; and
- Approval of a Tentative Subdivision Map.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

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

Discussion

a,b. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista.

Scenic views and scenic resources identified by the County, listed in Table 5.3-1 of the General Plan EIR, include areas along highways where viewers can see large bodies of water, river canyons, rolling hills, or forests. None of the highways listed in Table 5.3-1, nor any of the associated scenic views and resources, are located in the project site vicinity, with the exception of Latrobe Road, which is designated by the County as a scenic viewpoint and located approximately 1,000 feet east of the nearest portion of the site that is proposed for development. However, due to the hilly terrain and vegetation that lies between the project site and Latrobe Road, the site is not visible from the roadway. In addition, according to the California Scenic Highway Mapping System, the closest officially designated State Scenic Highway to the project site is State Route (SR) 50 beginning west of Placerville, approximately 15 miles northeast of the site.[2] The project site is also located approximately eight miles from SR 49, which is listed as an eligible State Scenic Highway; however, SR 49 is not officially designated. Given the site's distance from SR 49 and SR 50, the site is not visible from either roadway.

Based on the above, the proposed project would not have a substantial adverse effect on a scenic vista and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. Thus, a ***less-than-significant*** impact would occur.

c. The project site consists of rolling topography featuring a mosaic of grassland areas, oak woodlands, and seasonal drainages that trend eastward towards Latrobe Road and lack water until the winter and early spring. The project site contains an existing single-family residence and two ancillary structures and is otherwise undeveloped. With respect to the on-site oak woodlands, approximately 149 acres of oak woodland habitat are located

[2] California Department of Transportation. *California Scenic Highway System Map*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed May 2025.

along the site's eastern boundary located off Victoria Way; 122.5 acres of the oak woodland habitat are within the Oak Preservation Area that bisects the eastern portion of the site from north to south. Surrounding existing uses include undeveloped land and oak woodland the north; the El Dorado Trail Access Point, Latrobe Cemetery, and undeveloped land to the east; single-family residences and El Dorado Hills Fire Station 91 further east, across Latrobe Road; single-family residences and Millers Hill School to the south; and single-family residences and undeveloped land to the west. Given the rural character of the site vicinity, the project site is located within a non-urbanized area, and the relevant threshold is whether the project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Distinguishing between public and private views is important when evaluating changes to visual character or quality, because private views are views seen from privately-owned land and are typically associated with individual viewers, including views from private residences. Public views are experienced by the collective public and include views of significant landscape features and along scenic roads. According to CEQA (PRC, Section 21000 et seq.) case law, 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.'" Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views.

Public views of the project site are available from Victoria Way, South Shingle Road, and Settler's Trail. For the purpose of this analysis, public views consist of views towards the site from motorists and/or bicyclists traveling along the aforementioned roadways. Existing views of the site consist of the Oak Preservation Area to the east, as well as views of the existing on-site single-family residence. Views of the remainder of the site consist of undeveloped land and rolling hills generally sloping southwest. Changes to the existing public views towards the site due to development of the proposed project are discussed below.

While the proposed project would subdivide the project site into eight parcels, development of the site is not currently proposed. Nonetheless, it is anticipated that future development of the site would include the construction of seven new single-family residences and associated site improvements. Although plans for such residential development have not yet been prepared, future development of the site would likely alter the existing visual character of limited portions of the project site. It is noted, however, that the existing on-site oak woodlands within Parcel A-5 would not be disturbed by project buildout, thus preserving a key component of the site's visual character. Furthermore, single-family residences anticipated for development would be consistent with other existing single-family residences located in the site vicinity. Finally, future on-site residential development would be consistent with the site's General Plan and zoning designations. As such, while the proposed project would convert the generally undeveloped site to rural residential uses, such development, as well as potential aesthetic impacts, have been anticipated by the County and analyzed in the General Plan EIR.

Based on the above, the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and a ***less-than-significant*** impact would occur.

d. As noted previously, the project site is currently developed with one single-family residence and two ancillary structures within Parcel A-5, which constitutes an existing source of on-site light and glare. The existing single-family residences in the project site vicinity, as well as cars driving on adjacent roadways, also constitute existing sources of light and glare in the project site vicinity. Nonetheless, the majority of the project site is currently vacant. Although development on the project site is not currently proposed, future residential development would increase the amount of light within the project site from sources including, but not limited to, headlights on cars using the on-site street system, exterior light fixtures, and interior light spilling through windows.

All street lighting installed as part of the proposed project would be required to comply with the standards set forth in Section 130.34.020 (Outdoor Lighting) of the El Dorado County Code, which requires that outdoor lighting be located, adequately shielded, and directed such that direct light does not fall outside of the property line. Additionally, the proposed project would be required to adhere to the County's Interim Design Standards and Guidelines (IDSG), adopted December 3, 2024, including Section 3, which contains design criteria for outdoor lighting standards subject to approval by the County prior to final approval of improvement plans. Compliance with such would help to ensure that the light and glare created by the proposed project would be consistent with the levels of light and glare currently emitted in the surrounding developed environment. However, because the proposed project would introduce new sources of light or glare to the site which could adversely affect day or nighttime views in the area, a ***potentially significant*** impact may occur.

Mitigation Measure(s)

The following mitigation measure would reduce the above-stated impact to a *less-than-significant* level.

I-1. *In conjunction with grading and building permit submittal for each parcel, the property owner shall submit a detailed lighting plan for review and approval by the Planning and Building Department. The lighting plan shall include shielding all on-site lighting and demonstrate that nighttime lighting is directed within the project site and does not illuminate adjacent properties.*

II. AGRICULTURE AND FOREST RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	✖
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	✖	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	✖

Discussion

a,e. The majority of the project site is undeveloped, with the exception of a single-family residence and two ancillary structures within Parcel A-5. According to the California Department of Conservation (DOC) Important Farmland Finder, the project site is identified as Grazing Land.[3] The project site does not contain, and is not located adjacent to, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In addition, the County's General Plan designates the project site as RR, which allows for residential development, and the site is not currently used for agricultural purposes. Thus, implementation of the proposed project would not result in conflicts with the Farmland Protection Policy Act.

Based on the above, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, the proposed project would result in ***no impact***.

b. The project site is currently zoned RL-40 and has been anticipated for development with residential uses by the County. Although El Dorado County contains lands under a Williamson Act contract, all lands subject to the Wiliamson Act within the County are classified as Farmland of Local Importance or a higher classification. Because the DOC identifies the site as Grazing Land, the site is not subject to a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The County Agricultural Commission has reviewed the proposed project on October 11, 2023, and determined that although the project site is identified as Grazing Land, and future development of the site has the potential to diminish grazing capabilities, the project is consistent with the RR land use designation and RL-40

[3] California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/dlrp/ciff/. Accessed May 2025.

zoning, and residences are allowed by right. Therefore, the proposed project would result in a ***less-than-significant*** impact.

c,d. The project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). As noted above, the project site is currently zoned RL-40 and is designated for residential development. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and the project would not otherwise result in the loss of forest land or conversion of forest land to non-forest use. Thus, ***no impact*** would occur.

III. AIR QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	✖	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a,b. The project site is located within the El Dorado County portion of the Mountain Counties Air Basin (MCAB), which is under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD). Under State and federal law, the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to the State and national ambient air quality standards (AAQS). The El Dorado County portion of the MCAB is designated as nonattainment for the State and federal ozone, State particulate matter 10 microns in diameter (PM_{10}), and federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) standards, and attainment or unclassified for all other AAQS. The U.S. Environmental Protection Agency (USEPA) requires states with areas designated as nonattainment for national AAQS to prepare State Implementation Plans (SIP) that demonstrate attainment and maintenance of the national AAQS. The SIP contains the strategies and control measures for states to use to attain the national AAQS. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them.

Due to the nonattainment designations, the EDCAQMD, along with the other air districts in the nonattainment areas, is required to develop plans to attain the federal and State standards for ozone and particulate matter. According to the EDCAQMD, the applicable attainment plan is the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2017 Ozone Attainment Plan), adopted September 12, 2017. The USEPA determined the motor vehicle emission budgets in the 2017 Ozone Attainment Plan to be adequate and on October 22, 2021, the USEPA approved the 2017 Ozone Attainment Plan.

The 2017 Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the CAA requirements, including the NAAQS. The MCAB remains classified as a nonattainment area with an attainment deadline of July 2025. Since the deadline of July 2025, an update related to the attainment status has not been released.

According to the EDCAQMD, if a project can demonstrate consistency with the 2017 Ozone Attainment Plan, the project would not be considered to have a significant cumulative air quality impact with respect to ozone. Per the EDCAQMD's Guide to Air Quality Assessment, development projects within the MCAB portion of the County are considered consistent with the Attainment Plan if:

- The project does not require a change in existing land use designation, and project emissions of ROG and NO_X from the project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
- The project does not exceed the EDCAQMD's thresholds of significance for ROG and NO_X;
- The lead agency requires the project to implement any applicable emission reduction measures contained in and/or derived from the 2017 Ozone Attainment Plan;
- The project complies with all applicable EDCAQMD rules and regulations.[4]

According to the CEQA Guidelines, an air quality impact may be considered significant if the proposed project's implementation would result in, or potentially result in, conditions, which violate any existing local, State or federal air quality regulations. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants designated as nonattainment in the area, the EDCAQMD has established significance thresholds associated with development projects for emissions of reactive organic gases (ROG) and nitrogen oxide (NO_x) emissions. If a project would result in mass emissions in excess of the thresholds of significance, the project could affect the EDCAQMD's commitment to attainment of the federal AAQS for ozone and, thus, could result in a significant adverse impact on air quality in the region.

Thresholds for PM_{10} or other pollutants, including CO, PM, SO_2, NO_2, sulfates, lead, and H_2S, have not yet been established by the EDCAQMD. However, a project could be considered to have a significant impact on air quality if it would cause or contribute significantly to a violation of the applicable AAQS. According to the EDCAQMD CEQA Guide, if construction-related ROG and NO_X mass emissions are determined to be less than significant, the assumption could be made that construction-related exhaust emissions of other air pollutants from the operation of equipment and worker commute vehicles would also be less than significant.[5] Similarly, according to EDCAQMD's operational screening levels for CO and PM_{10}, if a project is anticipated to be below significance for ROG and NO_X, the project's CO and PM_{10} emissions are expected to be insignificant as well.

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 2 are the EDCAQMD's current thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. Thus, if the proposed project's emissions exceed the pollutant thresholds presented in Table 2, 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.

Table 2
EDCAQMD Thresholds of Significance

Pollutant	Construction Threshold (lbs/day)	Operational Threshold (lbs/day)
ROG	82	82
NO_X	82	82

Source: EDCAQMD. CEQA Guide. 2002.

[4] El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*. February 2002.

[5] *Ibid.*

Implementation of the proposed project would contribute local emissions in the area during both the construction and operation of the proposed project. The proposed project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.30 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, impervious areas such as driveways and sidewalks, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. The modeling for the proposed project applied the proposed single-family residential land use, specifically the proposed seven single-family homes, and accounted for the disturbance area associated with the widening of Settler's Trail. Where project-specific data was available, such data was input into the model (e.g., construction phases and timing, inherent site or project design features, compliance with applicable regulations, etc.). Accordingly, the proposed project's modeling conservatively assumed the following:

- Construction is estimated to begin in June 2026 and occur over an approximately 11-month period;
- The proposed project is estimated to be operational by 2027;
- All proposed single-family residences would include a natural gas fireplace, as indicated by the project applicant.

All CalEEMod results are included in Appendix A.

The results of the emissions analysis for construction and operational emissions are discussed separately below.

Construction Emissions

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, 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. Estimated unmitigated construction-related emissions are presented in Table 3.

Table 3
Maximum Unmitigated Construction Emissions (lbs/day)

	ROG	NO_X
Project Emissions	3.22	29.2
EDCAQMD Significance Threshold	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**

Source: CalEEMod, May 2025 (see Appendix A).

As shown in Table 3, the project's construction-related emissions would be below the applicable EDCAQMD thresholds of significance for ROG and NO_X.

The project is required to comply with all EDCAQMD rules and regulations for construction, including, but not limited to, the following, which would be noted on County-approved construction plans:

- Rule 202 related to visible emissions;
- Rule 215 related to architectural coatings;
- Rule 223 related to fugitive dust;
- Rule 224 related to cutback asphalt paving material, and
- Rule 300 related to open burning.

The EDCAQMD screening approach for fugitive dust (PM_{10}) emissions is based on dust suppression measures that would prevent visible emissions beyond the boundaries of the project site. If such measures are incorporated into the design of the project, then further calculation to determine PM_{10} emissions is not necessary. All construction activities that would result in the disturbance of soil occurring within El Dorado County are subject to EDCAQMD Rule 223 related to fugitive dust. Rule 223 includes requirements related to visible emissions, vehicle speed limits on unpaved roads, and cessation of certain construction activities during times of sustained, wind caused dust emissions. Compliance with the requirements of Rule 223 would ensure that measures sufficient to prevent visible emissions beyond the boundaries of the project site would be implemented. Accordingly, fugitive dust emissions are not anticipated to result in visible emissions beyond the boundaries of the project site and further calculation to determine PM_{10} emissions is not necessary.

Because the proposed project's estimated unmitigated construction emissions would be below the applicable EDCAQMD thresholds of significance, construction activities associated with development of the proposed project would not substantially contribute to the EDCAQMD's nonattainment status for ozone. Accordingly, construction of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Operational Emissions

Operational emissions of ROG and NO_X would be generated by the proposed project from both mobile and area sources. Day-to-day activities, such as resident vehicle trips, would make up the majority of the mobile emissions. Emissions would also occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.). As stated above, the project would be required to comply with all applicable EDCAQMD rules and regulations, including the following rules that specifically pertain to project operations:

- Rule 205 related to nuisance;
- Rule 207 related to particulate matter;
- Rule 215 related to architectural coatings;
- Rule 239 related to natural gas-fired residential water heaters; and
- Rule 502 related to general conformity.

Implementation of the above rules would likely reduce the operational emissions below the amount presented in Table 4. Nonetheless, the maximum unmitigated operational emissions for the proposed project are presented in Table 4 below.

Table 4
Maximum Unmitigated Operational Emissions (lbs/day)

	ROG	NO_X
Project Emissions	0.86	0.61
EDCAQMD Significance Threshold	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**

Source: CalEEMod, April 2024 (see Appendix A).

As shown in the table, unmitigated operational emissions would fall below the EDCAQMD's thresholds of significance for NO_X and ROG. Considering the modeled operational emissions of NO_X and ROG would not exceed the adopted EDCAQMD thresholds of significance, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and a less-than-significant impact would occur during operation.

Conclusion

Because the proposed project would not result in construction-related or operational emissions of criteria air pollutants in excess of EDCAQMD's thresholds of significance, the proposed project would not be considered to conflict with or obstruct the implementation of any applicable air quality plans. In addition, the proposed project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable AAQS. Therefore, a ***less-than-significant*** impact would occur.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest sensitive receptors to the project site are the single-family residences, approximately 260 feet from the site's southern boundary and approximately 140 feet from the site's western boundary.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Traffic congestion near a roadway's intersection with vehicles moving slowly or idling could result in localized CO emissions at that intersection due to a vehicle engine's inefficient combustion. High levels of localized CO concentrations are

only expected where background levels are high, and traffic volumes and congestion levels are high. Accordingly, a land use project could result in impacts associated with localized CO concentrations at roadway intersections if the project generates substantial traffic.

The MCAB has been in attainment for CO for multiple years. Due to the continued attainment of CAAQS and NAAQS, and advances in vehicle emissions technologies, the likelihood that any single project would create a CO hotspot is minimal. The proposed project is not anticipated to cause new, or worsen existing, traffic deficiencies on project area roadways. Therefore, given that high levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high, the proposed project would not be anticipated to generate localized CO emissions that would contribute to an exceedance of AAQS and/or expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (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. DPM is the solid material in diesel exhaust, more than 90 percent of such material is less than one micrometer in diameter, and, thus, DPM is a subset of the $PM_{2.5}$ category of pollutants. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed project would not generate any substantial pollutant concentrations during operations.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction 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 11-month 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 pursuant to 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 Technology (BACTs). Additionally, project construction would be required to comply with all applicable EDCAQMD rules and regulations, as detailed above. Construction activities would also be

restricted to daylight hours per the El Dorado County Code, Section 130.37.020 (I). Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low, and the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions.

Criteria Pollutants

The EDCAQMD thresholds of significance were established with consideration given to the health-based air quality standards established by the NAAQS, and are designed to aid the district in achieving attainment of the NAAQS.[6] Although the EDCAQMD's thresholds of significance are intended to aid achievement of the NAAQS for which the MCAB is in nonattainment, the thresholds of significance do not represent a level above which individual project-level emissions would directly result in public health impacts.

Nevertheless, a project's compliance with EDCAQMD's thresholds of significance provides an indication that criteria pollutants released as a result of project implementation would not inhibit attainment of the health-based regional NAAQS. Additionally, because the proposed project would not exceed the EDCAQMD's thresholds and, thus, would not inhibit attainment of regional NAAQS, the criteria pollutants emitted during project implementation would not result in measurable health impacts to sensitive receptors. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of criteria pollutants.

Conclusion

Based on the above analysis, the proposed project would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. Therefore, a ***less-than-significant*** impact would occur.

d. Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emissions of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections "a" through "c" above. Therefore, the following discussion focuses on emissions of odors and dust during construction and operation of the project.

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 do not exist. Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would not introduce any such land uses and is not located in the vicinity of any such existing or planned land uses.

Diesel fumes from construction equipment and heavy-duty trucks could be found to be objectionable; however, as addressed above, operation of construction equipment would be regulated by EDCAPCD rules and regulations, restricted to daylight hours per the El Dorado County Code, Section 130.37.020(I), and would occur intermittently throughout

[6] El Dorado County Air Pollution Control District. *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*. February 2002.

the course of a day. All construction equipment and operation thereof would be regulated per the statewide In-Use Off-Road Diesel Vehicle Regulation. In addition, construction is temporary, and construction equipment would operate intermittently throughout the course of a day and would likely only occur over portions of the improvement area at a time. It follows that nearby receptors would not be subjected to substantial odor concentrations. For the aforementioned reasons and due to the distance between the project site and the nearest sensitive receptors, the project would not result in any noticeable objectionable odors associated with construction.

In addition, EDCAQMD 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 EDCAQMD 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, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, the EDCAQMD would be required (per EDCAQMD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

Dust

As noted previously, construction of projects within El Dorado County are required to comply with all applicable EDCAPCD rules and regulations. The aforementioned rules would act to reduce construction-related dust by implementing dust control measures. EDCAPCD Rule 223 includes requirements to reduce fugitive dust emissions, such as limiting vehicle speed limits on construction sites and unpaved roads, reducing dust track-out, and use of water for soil stabilization when warranted. Compliance with Rule 223 would ensure that measures sufficient to prevent emissions of fugitive dust beyond the boundaries of the project site would be implemented. 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. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people, and impacts would be ***less than significant***.

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

Discussion

a. Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal and State Endangered Species Acts. Both Acts afford protection to listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, sensitive species included in USFWS Recovery Plans, and CDFW special-status invertebrates are all considered special-status species. Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA Guidelines Section 15380. In addition to regulations for special-status species, most birds in the U.S., including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal. In addition, plant species on California Native Plant Society (CNPS) Lists 1 and 2 are considered special-status plant species and are protected under CEQA (CEQA Guidelines Section 15380[b][2]).

The following discussion is based primarily on a Biological Assessment prepared for the proposed project by Moore Biological Consultants (see Appendix B).[7] Because Parcel A-5 is not proposed for development as part of the proposed project, and disturbance would not occur within the parcel, the Biological Assessment does not include an evaluation of

[7] Moore Biological Consultants. *294+/- Acre "Victoria Way" Site, El Dorado County, California: Biological Assessment.* September 1, 2022.

potential impacts to biological resources within that portion of the project site. As such, the "study area" of the Biological Assessment referred to throughout the discussion below includes all areas of the project site, with the exception of Parcel A-5.

According to the Biological Assessment, the study area currently consists primarily of open hillsides supporting annual grassland vegetation and blue oak woodlands, as well as a few aquatic features including several intermittent creeks, a few side-hill seeps, and a stock pond (see Figure 4). Cattle grazing, development, construction and use of farm roads and fire breaks, and off-road vehicles have somewhat modified vegetation and topography within the project vicinity, including that within the study area. As discussed in further detail below, the majority of existing on-site trees, which qualify as an oak woodland, are located in the eastern portion of the site.

As part of the Biological Assessment, a search of the California Natural Diversity Database (CNDDB) was conducted in order to identify special-status plant and wildlife species that may occur at or near the project site; the USFWS Information for Planning and Consultation (IPaC) and historic aerial imagery were also reviewed. The intent of the database review was to identify documented occurrences of special-status species in the vicinity of the project area, to determine their locations relative to the project site, and to evaluate whether the site meets the habitat requirements of such species. In addition, Moore conducted field surveys of the site in April, May, and June 2022, which consisted of walking and driving through the study area to make observations of habitat conditions as well as to note surrounding land uses, vegetation types, and plant and wildlife species.

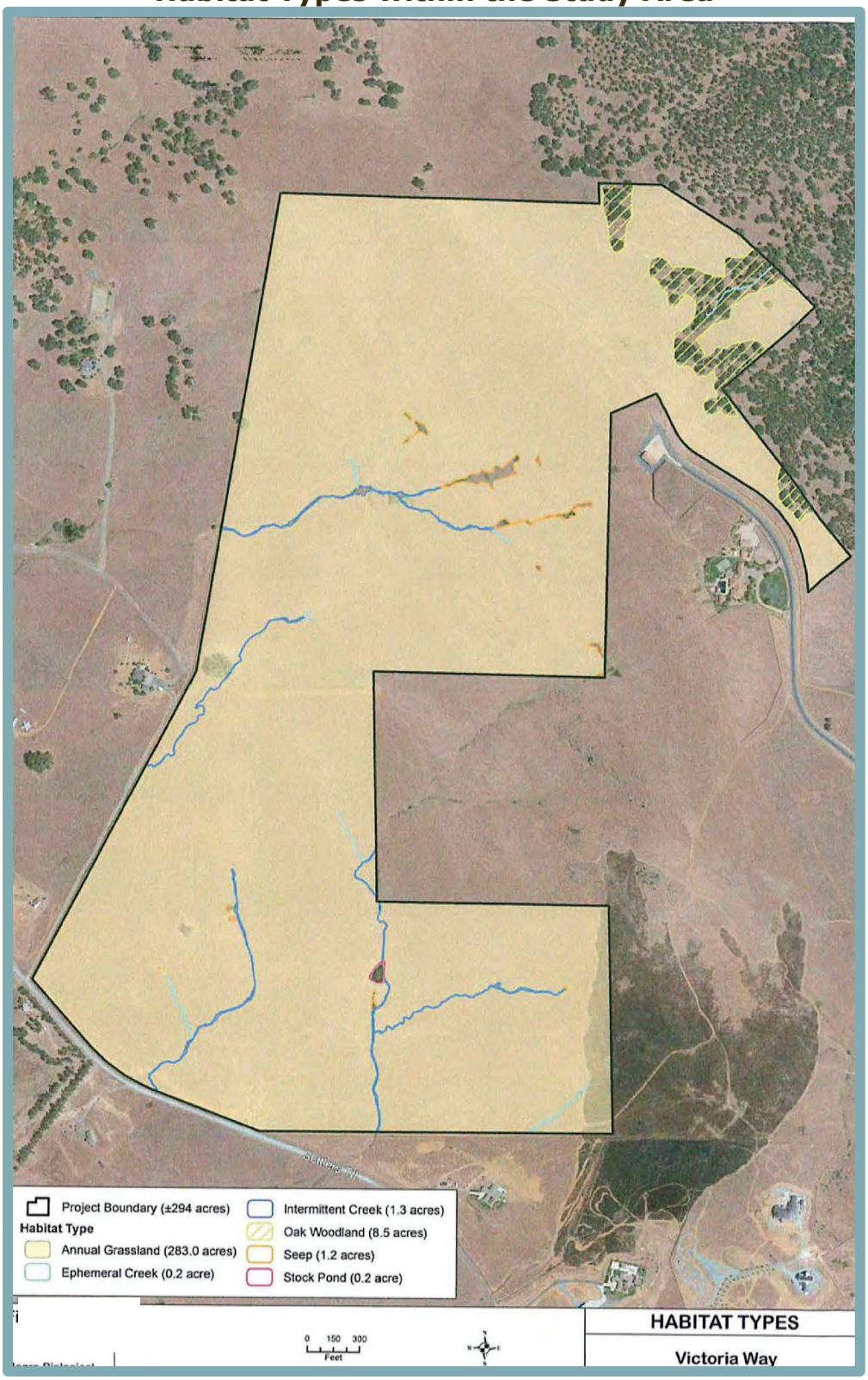
Based on the results of the CNDDB search and the field surveys, several special-status plant and wildlife species are known to occur within the project region. However, due to past site disturbance, the majority of species are not expected to occur within the study area due to lack of suitable habitat(s). The results of the site surveys and database reviews are discussed below.

Special-Status Plants

Special-status plants generally occur in relatively undisturbed areas within vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, chaparral, alkali playa, dunes, and areas with unusual soil characteristics.

Based on the CNDDB search conducted for the project area, Moore determined that a total of three special-status plant species are known to occur within the general vicinity of the project site: Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), Tuolumne button celery (*Eryngium pinnatisectum*), and Sanford's arrowhead (*Sagittaria sanfordii*). Although the project site contains potentially suitable habitat for the foregoing special-status plant species, Moore did not observe the species within the study area during the site surveys conducted in the spring and summer of 2022, during the species' blooming periods. In addition, the study area has been disturbed by grazing, off-road vehicles, and the construction of roads in the study area and on adjacent parcels and, thus, does not contain suitable habitat for any special-status plant species known to occur in the region. Therefore, Moore concluded that impacts to special-status plant species would not occur as a result of the proposed project.

Figure 4
Habitat Types within the Study Area



Note: The Biological Assessment study area did not include Parcel A-5, as disturbance of such is not proposed as part of the project.

Special-Status Wildlife

Based on the CNDDB search conducted for the project area, a total of eight special-status wildlife species are known to occur within the vicinity of the study area: Swainson's hawk (*Buteo swainsonii*), burrowing owl (*Athene cunicularia*), tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannum*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), Central Valley steelhead (*Oncorhynchus mykiss*), and vernal pool fairy shrimp (*Branchinecta lynchi*). However, based on the habitat available within the study area, Moore determined that of the eight species with the potential to occur within the study area, only Swainson's hawk, burrowing owl, tricolored blackbird, and northwestern pond turtle have a moderate potential for occurrence. In addition, loggerhead shrike (*Lanius ludovicianus*) was observed within the study area. Other nesting or foraging migratory birds and raptors protected under federal, State, and local laws also have the potential to occur within the study area.

In addition to the above, since the preparation of the Biological Assessment, Crotch's bumble bee (*Bombus crotchii*) was added as a candidate species for State listing. As such, the following analysis also addresses the potential for Crotch's bumble bee to occur within the study area.

Swainson's Hawk

Swainson's hawk is a State-listed threatened species. The species is a long-distance migrant with nesting grounds in western North America, and wintering grounds in Mexico and South America. Swainson's hawks typically arrive in the California Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to August, peaking in late May through July. In the Central Valley, Swainson's hawks generally nest in isolated trees, small groves of trees in agricultural land, or in large woodlands next to open grasslands or agricultural fields. The species typically nests near riparian areas; however, it has been known to nest in urban areas as well. Nest locations are usually in close proximity to suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa, and other hay crops, and low-growing row crops, especially post-harvest when the height of the vegetation is short and easy to observe prey. Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September.

According to the Biological Assessment, the open, annual grasslands throughout the study area could provide potentially suitable Swainson's hawk foraging habitat. However, Moore notes that the study area is located on the extreme east edge of the species' nesting range. In addition, the nearest occurrence of Swainson's hawk recorded in the CNDDB is located approximately 5.5 miles southwest of the study area. Accordingly, Swainson's hawk is unlikely to nest or forage in the vicinity. Furthermore, because future development of the project site would include the construction of one single-family residence on a small portion of each of the proposed parcels, ample foraging habitat would remain within the project site. However, the large trees both within the study area and in the vicinity of the study area could serve as potential nesting habitat. Therefore, without mitigation, implementation of the proposed project could result in an adverse effect to Swainson's hawk.

Burrowing Owl

Burrowing owl is a candidate for listing under the California Endangered Species Act (CESA). Burrowing owl generally occurs in a variety of open, arid habitats; typically

grasslands, desert scrub, agricultural fields, washes, and disturbed areas such as golf courses or vacant lots. Burrows, perch sites, and friable soil are vital habitat components for the species, and habitats with low-lying, sparse vegetation are preferred. Ground squirrel burrows and other fossorial mammal burrows are typically used for nesting and as year-round refuge sites. The species may also utilize culverts, abandoned pipes, rubble piles, and other manmade structures if burrows are absent. The breeding season for burrowing owls is from February 1 to August 31.

Moore did not observe any suitable burrows within the study area that could serve as nesting habitat for burrowing owl during their site survey. As such, the likelihood for burrowing owl to nest within the study area is low. However, the study area is within the species range and burrowing owl may fly over the study area and nest within the study area if burrow habitat becomes available. Therefore, without mitigation, the proposed project could result in an adverse effect to burrowing owl.

Tricolored Blackbird

The tricolored blackbird is a State of California Threatened Species and is also protected by the federal MBTA and FGCC. Tricolored blackbirds are colonial nesters and require very dense stands of emergent wetland vegetation and dense thickets of wild rose or blackberries for nesting. The preferred nesting habitat for this species is expansive stands of cattails and tules adjacent to open water.

Although tricolored blackbird is more commonly associated with larger open water habitats and larger stands of cattails, according to the Biological Assessment, the species could conceivably nest within the stock pond located within the study area. The grasslands within and adjacent to the study area could also provide marginal foraging habitat. While Moore did not observe tricolored blackbird within the study area during the site survey, several red-winged blackbirds were observed nesting in the emergent wetland vegetation within the stock pond. The nearest record of this species in the CNDDB search area is approximately four miles northwest of the study area. As such, tricolored blackbird could occur within the study area, and, without mitigation, the proposed project could result in an adverse effect to the species.

Loggerhead Shrike

Loggerhead shrike is a CDFW Species of Special Concern, but is not listed as a species at the state or federal level. The MTBA and FGCC protect loggerhead shrike year-round, as well as their nests during nesting season which is from January to July. Loggerhead shrike can be found in habitats such as agricultural fields, riparian areas, and pastures. Although occurrences of loggerhead shrike have not been recorded within the CNDDB search area, two loggerhead shrikes were seen foraging and perching in trees within the study area during multiple survey days. If such individuals are still present within the study area during future construction, a potentially adverse impact could occur.

Northwestern Pond Turtle

The northwestern pond turtle is proposed for federal listing as threatened and is a CDFW Species of Special Concern. Northwestern pond turtle’s favored habitats include streams, large rivers, and canals with slow-moving water, aquatic vegetation, and open basking sites. Although the turtles must live near water, the species can tolerate drought by burrowing into the muddy beds of dried drainages. The species feeds mainly on invertebrates, such as insects and worms, but will also consume small fish, frogs,

mammals, and some plants. Northwestern pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. The species breeds from mid to late spring in adjacent open grasslands or sandy banks.

Although small and isolated, the stock pond within the study area provides marginally suitable habitat for northwestern pond turtle. The stock pond is also very muddy and shallow, providing limited swimming opportunities for turtles of any species. In addition, turtles were not observed within the study area during the site surveys, and the Biological Assessment states that it is unlikely that a turtle would travel across roads and expansive grasslands from a different water source to reach the on-site stock pond. The nearest occurrence of western pond turtle in the CNDDB search area is approximately 2.5 miles northwest of the study area. Nonetheless, because the study area contains potentially suitable habitat, without mitigation, implementation of the proposed project could result in an adverse effect to northwestern pond turtle.

Nesting and Foraging Migratory Birds and Raptors

Suitable nest locations for migratory birds and raptors include, but are not limited to trees, shrubs, herbaceous vegetation and bare ground. The potential exists for migratory birds and raptors protected under the MBTA to nest within the trees within the study area. Activities associated with future development of the study area, such as clearing, grading, and other ground-disturbing activities during the avian nesting season (February 1 through August 31) could result in injury or mortality of eggs and chicks directly through destruction or indirectly through forced nest abandonment due to noise and other disturbance. As such, in the absence of mitigation, implementation of the proposed project could result in adverse effects to nesting migratory birds and raptors that are protected under the MBTA.

Crotch's Bumble Bee

Crotch's bumble bee is not federally listed but is a candidate for listing under CESA. Crotch's bumble bee occurs primarily in California, including the Mediterranean region, Pacific Coast, West Desert, Great Valley, and adjacent foothills through most of southwestern California. The species also occurs in Mexico (Baja California and Baja California Sur) and has been documented in southwest Nevada, near the California border. The species was historically common in the Central Valley of California, but now appears to be absent from most of the Valley, especially in the center of its historic range. In California, Crotch's bumble bee inhabits open grasslands and scrub habitats.

All bumble bees have three basic requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the entirety of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. Nests are often located underground in abandoned holes made by ground squirrels, mice, and rats, or occasionally abandoned bird nests. Some species nest on the surface of the ground in tufts of grass or in empty cavities. Bumble bees that nest aboveground may require undisturbed areas with nesting resources such as grass and hay to protect nests. As such, areas with woody cover, or other sheltered areas, such as downed wood, rock walls, or brush piles, provide bumble bees sites to build nests.

Bumble bees depend on the availability of habitats with a rich supply of floral resources that bloom continuously during the entirety of the colony's life. The queen collects nectar and pollen from flowers to support the production of her eggs, which are fertilized by sperm she has stored from mating the previous fall. As generalist foragers, bumble bees do not

depend on any one flower type. Bumble bees generally prefer flowers that are purple, blue, or yellow; they are essentially blind to the color red. Very little is known about hibernacula, or overwintering sites utilized by most bumble bees. Generally, bumble bees overwinter in soft, disturbed soil, under leaf litter or other debris, in abandoned holes, or occasionally in abandoned burrows. Some species nest on the surface of the ground in grassy tussocks, or in empty cavities such as hollow logs, dead trees, or under rocks. Queens most likely overwinter in small cavities just below or on the ground surface.

The annual grassland and oak woodland within the study area represents suitable habitat for Crotch's bumble bee. As such, without mitigation, implementation of the proposed project could result in an adverse effect to the species.

Conclusion

Based on the above, ground-disturbing activities associated with future development of the project site would modify existing habitat and, therefore, could result in adverse effects to Swainson's hawk, burrowing owl, tricolored blackbird, loggerhead shrike, northwestern pond turtle, other nesting migratory birds and raptors protected by the MBTA, and Crotch's bumble bee. As such, the proposed project could result in an adverse effect, either directly or through habitat modifications, on species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. Therefore, the impact would be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would ensure the above impact is reduced to a *less-than-significant* level.

Swainson's Hawk

IV-1. *Prior to the commencement of construction activities within each parcel during the nesting season for Swainson's hawk (approximately March 1 to September 15), a qualified biologist shall conduct at least two preconstruction surveys for active nests within 0.25-mile of the area proposed for development. If feasible, one survey should occur in period II (March 20 – April 5) and one survey should occur in period III (April 5 – April 20) as indicated in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). If the final survey is completed more than 14 days prior to initiation of construction, an additional survey shall be conducted no more than 14 days prior to the start of construction to ensure that nesting has not been initiated within the intervening time. If construction begins prior to or after the period II or III dates, two surveys shall be completed no more than 14 days prior to the start of construction, with the second survey being at least 48 hours following the first survey. If portions of the survey area outside of the project site are inaccessible for any reason, the qualified biologist shall use binoculars to visually determine whether Swainson's hawk nests occur within the 0.25-mile survey area. A letter report with the pre-construction survey results shall be provided to the El Dorado County Planning and Building Department within 30 days of the final survey. The survey results shall only be valid for the year in which they are conducted.*

If no active Swainson's hawk nests are identified on or within 0.25-mile of the project site, no further avoidance and minimization measures for Swainson's hawk nesting habitat are required.

If active Swainson's hawk nests are found within 0.25-mile of the area where construction activities will occur, the qualified biologist shall contact the County within one business day following the pre-construction survey to report the findings and no construction shall commence within 0.25-mile until the qualified biologist prepares a take avoidance plan. For the purposes of this mitigation measure, construction activities are defined to include heavy equipment operation associated with vegetation clearing, grading, construction (use of cranes or draglines, new rock crushing) or other project-related activities that could cause nest abandonment or forced fledging within 0.25-mile of a nest site. The take avoidance plan shall be prepared by a qualified biologist and submitted to the El Dorado County Planning and Building Department and CDFW for review, and shall be approved by the El Dorado County Planning and Building Department. Such a plan shall address appropriate construction setbacks (no-disturbance buffers), placement of high-visibility construction fencing along the setback boundaries, and monitoring of the nest during construction activities. The qualified biologist shall have the authority to stop construction activities if nesting hawks or young in the nest show signs of distress; if this occurs, construction may not resume until the County is consulted and the construction setback is increased, the young have fledged or the nest is no longer active, or other take-avoidance measures are modified to the satisfaction of the qualified biologist. If implementation of take avoidance measures are required, a letter report describing implementation of the take avoidance measures will be submitted to the El Dorado County Planning and Building Department within 30 days of the final monitoring event. No further avoidance and minimization measures for nesting habitat would be required once the qualified biologist determines that the nest is no longer active.

Burrowing Owl

IV-2. *A pre-construction survey for burrowing owls within the parcel proposed for the development and a 500-foot buffer surrounding the parcel shall be conducted within 15 days of project construction. The pre-construction survey shall be conducted by a qualified biologist consistent with the CDFW 2012 Staff Report on Burrowing Owl Mitigation. If a lapse in project-related work of 15 calendar days or longer occurs, an additional survey shall be required prior to reinitiation. A written summary of the survey results shall be submitted to the El Dorado County Planning and Building Department before any construction permits are issued. If burrowing owls or active burrows/refugia are not found, then further mitigation measures are not necessary.*

If an active burrow (i.e., a burrow occupied by at least one adult burrowing owl) is found, the property owner shall implement the following measures:

1. *Avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (including individuals or family groups foraging on or near the site following fledging);*

2. *Establish and maintain a minimum buffer of 164 feet around the occupied burrow during construction. The actual buffer size shall be determined by the qualified biologist based on the time of year and level of disturbance in accordance with guidance provided in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) and may be as large as 1,640 feet. Construction activities shall not take place within the buffer, and the no-disturbance buffer shall be marked on-site. Any modifications to the aforementioned buffer shall be approved by the County in consultation with CDFW. The buffer reduction request shall include relevant information and/or propose new measures to justify the buffer reduction. The buffer may be removed once the burrow is not occupied; and*
3. *Burrow exclusion shall only be conducted during the non-breeding season for active burrows located within the site boundaries, and in limited instances within a buffer zone around the site, as determined by the County in consultation with CDFW after all avoidance and minimization measures have been exhausted. The property owner shall acquire an Incidental Take Permit (ITP) from CDFW prior to exclusion. Following the ITP, any exclusion and burrow collapse activities shall be conducted in accordance with the CDFW Staff Report on Burrowing Owl Mitigation. The foregoing guidance requires a Burrowing Owl Exclusion Plan to be developed and approved by a qualified biologist in consultation with CDFW for the County's review and approval prior to burrow exclusion and/or closure.*

If nesting burrowing owls are found during the pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of the active burrow) shall be accomplished at a 1:1 ratio or at a ratio acceptable to the County. The mitigation provided shall be consistent with recommendations in the CDFW Staff Report on Burrowing Owl Mitigation.

Nesting Migratory Birds and Raptors (Including Tricolored Blackbird and Loggerhead Shrike)

IV-3. *The property owner shall implement the following for each parcel:*

- *If ground disturbance or other construction activities within each parcel are proposed during the bird nesting season (February 1 – August 31), a focused survey for nesting raptors and migratory bird nests shall be conducted by a qualified biologist within 14 days prior to the beginning of construction activities in order to identify active nests. This survey shall be conducted within the proposed construction area and all accessible areas within the following buffer areas:*
    - *0.25-mile for tree-nesting raptors; and*
    - *500 feet for all other species.*
- *If active raptor nests are found, construction activities shall not take place within 500 feet of raptor nest(s), or if active songbird nests are found, a 100-foot no disturbance buffer shall be established.*

These buffers shall remain in place until the young have fledged, as determined by a qualified biologist.

- *The limit of work shall be indicated by bright orange temporary fencing or other similar highly-visible marker. Construction activities or personnel shall not cross the fencing, except with approval of a qualified biologist. If trees containing nests or burrows must be removed as a result of parcel development, removal shall be completed during the nonbreeding season (late September to March) if possible, or after a qualified biologist determines that the young have fledged (during the breeding season).*
- *If active nests are not found during the required pre-construction surveys, further mitigation shall not be required.*
- *Survey results shall be provided to the El Dorado County Planning and Building Department within 15 days of completion of all surveys. Surveys shall be repeated if there is a break of construction of more than 14 days during the nesting season.*

Northwestern Pond Turtle

IV-4. *Within 24 hours of commencement of ground-disturbing activities within each parcel, a qualified biologist familiar with the life history of northwestern pond turtle and experienced in performing surveys for northwestern pond turtle shall conduct a focused survey of aquatic and upland habitat suitable for the species on the project site. The qualified biologist shall inspect the project site for northwestern pond turtles, as well as suitable terrestrial nesting or overwintering habitat (i.e., burrows).*

If a northwestern pond turtle nest is observed within the parcel proposed for development during the preconstruction survey, the nest shall be fenced off and avoided until the eggs hatch or the nest is no longer active, as determined by a qualified biologist. The fenced area shall be open on one side with the opening facing the nearest aquatic habitat so that hatchling turtles can freely travel from the nest to the aquatic habitat. A qualified biologist shall monitor the nest area to ensure that hatchlings do not disperse into the construction area. Monitoring shall occur until the qualified biologist determines that the nest is no longer active. If any hatchlings are observed within the parcel proposed for development, relocation of hatchlings shall occur as described in the encounter protocol below.

A qualified biologist shall be present during initial ground-disturbing activities for each parcel of the project site to monitor these activities. If a western pond turtle is encountered, work shall be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, a qualified biologist shall notify CDFW to determine the appropriate procedures related to relocation, which shall include, but not be limited to, obtaining a valid and applicable CDFW Scientific Collecting Permit. Any worker who inadvertently injures or kills a western pond turtle or who finds a western pond turtle dead, injured, or entrapped must immediately report the incident to the construction coordinator(s), who must immediately notify CDFW. Entrapped western pond turtles shall be relocated by a qualified biologist with a valid and applicable CDFW Scientific Collecting Permit if approved by CDFW.

Crotch's Bumble Bee

IV-5. *If, at the time of project implementation, Crotch's bumble bee is not designated as a California Endangered Species Act (CESA) candidate or CESA listed, mitigation is not required. However, if the species is a CESA candidate or CESA listed or is otherwise considered to be a special-status species, the following mitigation shall be required.*

If feasible, initial ground-disturbing activities associated with development of each parcel of the project site (e.g., grading, vegetation removal, staging) shall take place between September 1 and March 31 (i.e., outside the colony active period) to avoid potential impacts on Crotch bumble bee. If completing all initial ground-disturbing activities between September 1 and March 31 is not feasible, then at a maximum of 14 days prior to the commencement of construction activities of each parcel of the project site, a qualified biologist with 10 or more years of experience conducting biological resource surveys within California shall conduct a preconstruction survey for Crotch's bumble bee in the area(s) proposed for impact.

The survey shall occur during the period from one hour after sunrise to two hours before sunset, with temperatures between 65 degrees Fahrenheit and 90 degrees Fahrenheit, with low wind and zero rain. If the timing of the start of construction makes the survey infeasible due to the temperature requirements, the surveying biologist shall select the most appropriate days based on the National Weather Service seven-day forecast and shall survey at a time of day that is closest to the temperature range stated above. The survey duration shall be commensurate with the extent of suitable floral resources (which represent foraging habitat) present within the area proposed for impact, and the level of effort shall be based on the metric of a minimum of one person-hour of searching per three acres of suitable floral resources/foraging habitat. A meandering pedestrian survey shall be conducted throughout the area proposed for impact in order to identify patches of suitable floral resources.

Suitable floral resources for Crotch bumble bee include species in the following families: Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae.

At a minimum, preconstruction survey methods shall include the following:

- *Search areas with floral resources for foraging bumble bees. Observed foraging activity may indicate a nest is nearby, and therefore, the survey duration shall be increased when foraging bumble bees are present;*
- *If bumble bees are observed, watch any bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest;*
- *Visually look for nest entrances. Observe burrows, any other underground cavities, logs, or other possible nesting habitat;*

- *If floral resources or other vegetation preclude observance of the nest, small areas of vegetation may be removed via hand removal, line trimming, or mowing to a height of a minimum of four inches to assist with locating the nest;*
- *Look for concentrated bumble bee activity;*
- *Listen for the humming of a nest colony; and*
- *If bumble bees are observed, attempt to photograph the individual and identify it to species.*

The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a list of bumble bee species observed, a description of any vegetation removed to facilitate the survey, and their determination of if survey observations suggest a Crotch's bumble bee nest(s) may be present or if construction activities could result in take of Crotch bumble bees. The survey report shall be submitted to the El Dorado County Planning and Building Department prior to the commencement of construction activities.

If bumble bees are not located during the preconstruction survey or the bumble bees located are definitively identified as a common species (i.e., not special-status species), then further mitigation or coordination with the California Department of Fish and Wildlife (CDFW) is not required.

If any sign(s) of a bumble bee nest is observed, and if the species present cannot be established as a common bumble bee, then construction shall not commence until either (1) the bumble bees present are positively identified as common (i.e., not a special-status species), or (2) the completion of coordination with CDFW to identify appropriate mitigation measures, which may include, but not be limited to, waiting until the colony active season ends, establishment of nest buffers, or obtaining an Incidental Take Permit (ITP) from CDFW.

If Crotch's bumble bees are located, and after coordination with CDFW take of Crotch's bumble bees cannot be avoided, the property owner shall obtain an ITP from CDFW, and the property owner shall implement all conditions identified in the ITP. Mitigation required by the ITP may include, but not be limited to, the property owner translocating nesting substrate in accordance with the latest scientific research to another suitable location (i.e., a location that supports similar or better floral resources as the impact area), enhancing floral resources on areas of the project site that will remain appropriate habitat, worker awareness training, and/or other measures specified by CDFW.

b,c. Coinciding with the field surveys conducted for the Biological Assessment, Moore conducted a preliminary wetland delineation to assess for the potential presence of riparian habitat or jurisdictional waters of the State or the U.S, the results of which are summarized in the Aquatic Resources Delineation (ARD) prepared for the project site (see

Appendix C).[8] The findings of the ARD were then supplemented by a Clear-Span Creek Crossings Wetland and Permit Review (Wetland and Permit Review), also prepared by Moore (see Appendix D).[9]

Although riparian habitat was determined to be absent from the project site, Moore identified a total of 2.88 acres of wetlands on-site. On-site wetlands consist of six intermittent creeks (IC-1 through IC-6) totaling 1.32 acres, eight ephemeral creeks (EC-1 through EC-8) totaling 0.2-acre, 12 seeps (Seep-1 through Seep-12) totaling 1.2 acres, and one 0.17-acre stock pond (SP-1) (see Figure 5). With the exception of Seep-1, Seep-2, Seep-4, Seep-6, and Seep-9, Moore determined that all of the foregoing on-site wetlands have the potential to fall under the jurisdiction of the State or the U.S. due to their tributary relationship to the Consumnes River.

According to the Wetland and Permit Review, the proposed roadway improvements would avoid potential impacts to on-site wetlands. As discussed therein, the proposed extension of Victoria Way would not overlap with any on-site wetlands. Future development of the project site would include new access roadways, which would cross over three intermittent creeks (IC-1, IC-3, and IC-5). The proposed project would use clear-span crossings at the three intermittent creek crossings. The proposed crossings would entirely span the intermittent creeks, thereby eliminating the placement of fill associated with the proposed creek crossings that would trigger a permit from the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB). According to the Wetland and Permit Review, clear-span crossings also do not involve the modification of the bed or bank of a stream, thereby negating the need for a Streambed Alteration Agreement from CDFW.

However, future residential development of the project site, including construction of driveways, home pads, patios, pools, etc., could result in the disturbance of the on-site wetlands. As such, without measures to ensure that future development would not result in the disturbance of on-site aquatic resources, the proposed project could trigger the need for permits from the USACE and the RWQCB.

Based on the above, future on-site development associated with the proposed project could result in impacts related to having a substantial adverse effect on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS or related to having a substantial adverse effect on State and federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Thus, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the above impact is reduced to a *less-than-significant* level.

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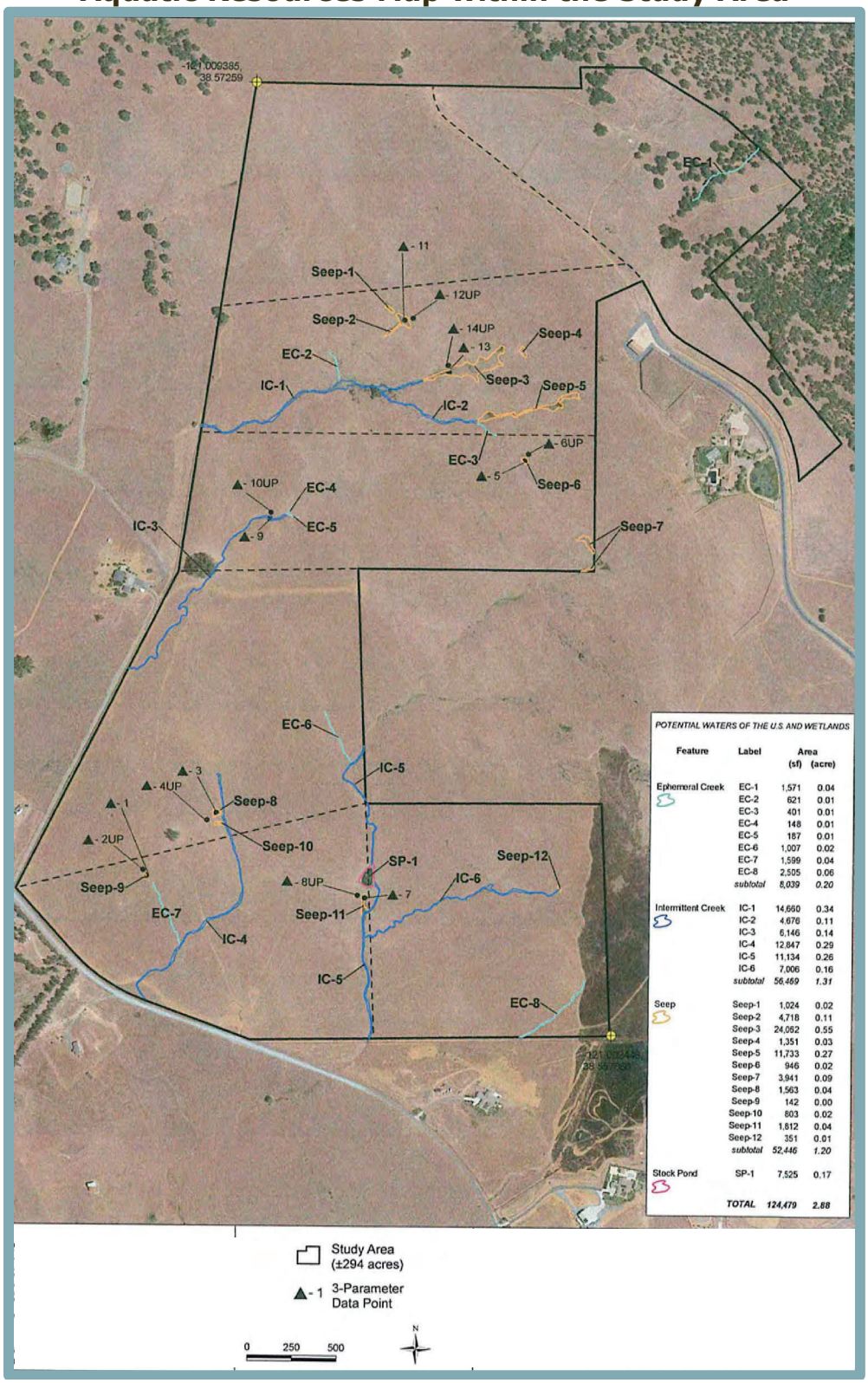
8 Moore Biological Consultants. *Routine Wetland Delineation: 294+/- Acre "Victoria Way" Site, El Dorado County, California.* August 2022.

9 Moore Biological Consultants. *"Rancho Victoria Tentative Map" (TM22-0004), El Dorado County, California: Clear-Span Creek Crossings Wetland and Permit Review.* March 17, 2025.

Figure 5
Aquatic Resources Map within the Study Area



POTENTIAL WATERS OF THE U.S. AND WETLANDS

Feature	Label	Area (sf)	Area (acre)
Ephemeral Creek	EC-1	1,571	0.04
	EC-2	621	0.01
	EC-3	401	0.01
	EC-4	148	0.01
	EC-5	187	0.01
	EC-6	1,007	0.02
	EC-7	1,599	0.04
	EC-8	2,505	0.06
	subtotal	*8,039*	*0.20*
Intermittent Creek	IC-1	14,660	0.34
	IC-2	4,676	0.11
	IC-3	6,146	0.14
	IC-4	12,847	0.29
	IC-5	11,134	0.26
	IC-6	7,006	0.16
	subtotal	*56,469*	*1.31*
Seep	Seep-1	1,024	0.02
	Seep-2	4,718	0.11
	Seep-3	24,062	0.55
	Seep-4	1,351	0.03
	Seep-5	11,733	0.27
	Seep-6	946	0.02
	Seep-7	3,941	0.09
	Seep-8	1,563	0.04
	Seep-9	142	0.00
	Seep-10	803	0.02
	Seep-11	1,812	0.04
	Seep-12	351	0.01
	subtotal	*52,446*	*1.20*
Stock Pond	SP-1	7,525	0.17
	TOTAL	*124,479*	*2.88*

Note: The Biological Assessment study area did not include Parcel A-5, as disturbance of such is not proposed as part of the project.

IV-6. *In conjunction with submittal of improvement plans for each parcel, the property owner shall submit a detailed site plan for review and approval by the El Dorado County Planning and Building Department showing that development will avoid all wetlands identified in Figure 5, Aquatic Resources Map within the Study Area, of the IS/MND prepared for the proposed project.*

d. Habitat loss, fragmentation, and degradation have the potential to alter the use and viability of wildlife movement corridors (i.e., linear habitats that naturally connect and provide passage between two or more otherwise distinct larger habitats or habitat fragments). The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

The majority of the project site is currently undeveloped, and undeveloped land surrounds the site to the north, east, and west. As such, the site has the potential to be used as a wildlife corridor or native wildlife nursery site. Although future development of the project site may limit such use in the future, wildlife species would still be able to traverse the undeveloped areas in the site vicinity. In addition, due to the low density of residential development that could occur on-site in the future, it is likely that wildlife species would still have the ability to cross through the project site following development.

Therefore, impacts related to interfering with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites would be ***less than significant***.

e. According to the Oak Woodlands Assessment (OWA) prepared for the proposed project by Foothill Resource Management (see Appendix E),[10] the area of Parcel A-5 that is primarily occupied by oak trees qualifies as "Oak Woodland," as defined by Section 1363 of the California Fish and Game Code. However, as previously discussed, the approximately 149 acres of on-site oak woodland habitat would be preserved as part of the proposed project. In addition, the OWA determined that although Parcel A-8 contains some oak canopy coverage, future development of the parcel is not likely to eliminate the oak canopy. Nonetheless, if future development of the project site would result in the disturbance of the oak woodland within Parcel A-8, the proposed project could conflict with local policies or ordinances protecting biological resources, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the above impact is reduced to a *less-than-significant* level.

IV-7. *Prior to initiation of ground disturbing activities within Parcel A-8, the property owner shall submit an Oak Resources Technical Report (ORTR) and an Oak Resources Code Compliance Certificate to the El Dorado County Planning and Building Department that address all oak tree and oak woodland impacts within Parcel A-8. The following mitigation for oak woodlands and individual oak trees shall be accomplished using one or more of the following options:*

[10] Foothill Resource Management. *Dynamic Trades, Inc. property, APN 087-010-043*. November 18, 2021.

a. In-lieu fee payment based on the percent of on-site Oak Woodland impacted by the development and the DBH inches of trees impacted to be either used by the County to acquire off-site deed restrictions and/or conservation easements or to be given by the County to a land conservation organization to acquire off-site deed restrictions and/or conservation easements.

1. In accordance with El Dorado County's Oak Resources Management Plan (ORMP), the property owner would be required to mitigate at a ratio of 1:1 for impacts to 0 to 50 percent of the Oak Woodland within Parcel A-8, unless it can be shown in the final ORTR, based on final project design, that the project would impact a lesser amount of oak woodland.

b. Off-site deed restriction or conservation easement acquisition for purposes of off-site oak woodland conservation consistent with Chapter 4.0 (Priority Conservation Areas) of the ORMP;

c. Replacement planting within an area on-site for up to 50 percent of the total oak woodland mitigation requirement consistent with Section 2.4 (Replacement Planting Guidelines) of the ORMP. This area shall be subject to a Deed Restriction or Conservation Easement;

d. Replacement planting within an area off-site for up to 50 percent of the total oak woodland mitigation requirement. Off-site replacement planting areas shall be consistent with Section 2.4 (Replacement Planting Guidelines) and Chapter 4.0 (Priority Conservation Areas) of the ORMP. This area shall be subject to a Deed Restriction or Conservation Easement; or

e. A combination of options a through d above.

The final form of mitigation shall be approved by the El Dorado County Planning and Building Department prior to initiation of any ground disturbing activities.

f. El Dorado County does not participate in any adopted Habitat Conservation Plan or Natural Conservation Community (HCP/NCCP). Therefore, the project site is not located in an area with an approved HCP/NCCP, or local, regional, or State habitat conservation plan, and ***no impact*** would occur regarding a conflict with the provisions of such a plan.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	✖	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	✖	☐	☐

Discussion

The following discussion is based primarily on a Cultural Resources Study that was prepared for the proposed project by Historic Resource Associates.[11]

a. 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 part of the Cultural Resources Study, a records search of the California Historic Resources Information System (CHRIS) was performed by the North Central Information Center (NCIC) for cultural resource site records and survey reports within the project area. The CHRIS records search indicated that previous cultural resource surveys had been conducted of the project site and the vicinity, which identified three isolated cultural resources in the project area, all of which consist of remnants of sheepherder camps dating from the 1870s to the 1910s. However, none of the foregoing resources have been registered in the National Register of Historic Places (NRHP) or the California Register of Historical Places (CRHR). In addition, the aforementioned cultural resources are located within the on-site oak woodland habitat that is proposed for preservation on Parcel A-5 and, thus, would not be disturbed by future project buildout.

Based on the above, the proposed project would not have the potential to impact previously recorded on-site historical resources. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5, and a ***less-than-significant*** impact would occur.

b,c. As a result of the previous cultural resource studies conducted in the project area, three formally recorded precontact archaeological sites were identified on-site (P-09-0034I/CA-ELD-253, P-09-001247/CA-ELD-000974, and P-09-000342). The Cultural Resources Study conducted for the proposed project included a site survey, which confirmed the presence of the archaeological sites within the project site. Two of the aforementioned archaeological sites confirmed by the Cultural Resources Study are located within Parcel A-5 of the proposed Tentative Subdivision Map, which is not proposed for development. As discussed further in Section XVIII, Tribal Cultural Resources, of this IS/MND, and pursuant to Mitigation Measure XVIII-1, Parcel A-5 would be designated as an

[11] Historic Research Associates. *Cultural Resources Study: Dynamic Trades Parcel Split Project.* December 2021.

Environmentally Sensitive Area and subject to a recorded non-disturbance deed restriction. In addition, the proposed project would be required to preserve and deed-restrict in perpetuity non-disturbance areas for all previously recorded and newly identified resources, as well as a 100-foot buffer around each, as identified on the Tentative Subdivision Map prepared for the proposed project (see Figure 3, ESAs, or Environmentally Sensitive Areas). Such measures would ensure that the identified archaeological resources would not be impacted by the proposed project or by any future development.

Furthermore, considering that additional unknown archaeological resources, including human remains, have the potential to exist on-site, ground-disturbing activity related to project construction could encounter such resources. Therefore, the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of dedicated cemeteries, during construction. Thus, a ***potentially 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.

V-1. *If potential cultural resources, including archaeological resources or Tribal Cultural Resources, are discovered during project construction, then all work must halt within a 100-foot radius of the discovery and the El Dorado County Planning and Building Department shall be notified immediately.*

If the discovery may constitute a Tribal Cultural Resource as defined in Public Resources Code section 21074, evaluation and treatment shall be conducted in accordance with Mitigation Measures XVIII-2 through XVIII-4, in consultation with the culturally affiliated Tribe.

For discoveries that do not constitute Tribal Cultural Resources, a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologists, shall be called to evaluate the significance of the find pursuant to CEQA Guidelines section 15064.5. If a discovery is determined not to be a Tribal Cultural Resource and is not eligible for listing on the NRHP/CRHR, work may resume following County approval. If the resource is determined to be eligible, mitigation shall prioritize avoidance and preservation in place where feasible. Data recovery or other forms of mitigation shall only be considered where avoidance is infeasible and shall be implemented in accordance with County approval. Nothing in this measure shall be construed to authorize data recovery or scientific study of Tribal Cultural Resources except as expressly approved in writing by the culturally affiliated Tribe.

V-2. *The following language shall be noted on the improvement plans for each parcel, subject to review and approval by the El Dorado County Planning and Building Department.*

If articulated or disarticulated human remains are encountered on the project site during construction activities, all work within 50 feet of the find

must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The El Dorado 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 recommendations 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.

Treatment and disposition of Native American human remains shall also be subject to the consultation and reburial provisions set forth in Mitigation Measures XVIII-1 through XVIII-4.

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

Discussion

a,b The main forms of available energy supply are electricity, natural gas, and oil. A description of the California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2022 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC which became effective with the rest of the CBSC on January 1, 2023.[12] The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Incentives for installation of electric heat pumps, which use less energy than traditional heating, ventilation, and air conditioning (HVAC) systems and water heaters;
- Required solar PV system and battery storage standards for certain buildings; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2022 Building Energy Efficiency Standards is a portion of the CBSC that went into effect on January 1, 2023. The 2022 standards provide for additional efficiency improvements beyond the 2019 standards. The 2022 Building Energy Efficiency

[12] California Building Standards Commission. *2022 California Green Building Standards Code*. 2023.

Standards expand upon energy efficiency measures from the 2019 Building Energy Efficiency Standards, resulting in a further reduction in energy consumption from the 2019 standards for residential structures. The 2022 Building Energy Efficiency Standards include requirements that encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, and strengthen ventilation standards.

Construction Energy Use

Although development of the site is not intended at this time, the future residential development of the project site would require site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., site clearing and grading), and the actual construction of the buildings.

The types of on-site equipment used during future construction of the project site 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. 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 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. Project construction would not involve the use of natural gas appliances or equipment.

All construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits 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. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions by requiring construction vehicles to become cleaner through the use of renewable energy resources. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB has prepared the 2022 Climate Change Scoping Plan Update (2022 Scoping Plan),[13] 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. Appendix B of the 2022 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 described above, with which the proposed project must comply, would

[13] California Air Resources Board. *The 2022 Climate Change Scoping Plan Update*. September 21, 2022.

be consistent with the intention of the 2022 Scoping Plan and the recommended actions included in Appendix B of the 2022 Scoping Plan.

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 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, which would help to reduce the temporary increase in demand.

The proposed project would also be required to comply with CCR Title 13, Sections 2449(d)(3) and 2485, which limits idling from both on-road and off-road diesel-powered equipment. Thus, it is anticipated that construction of the proposed plan would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy.

Operational Energy Use

Following implementation of the proposed project, Pioneer Community Energy would provide electricity to the project site. Although home development is not currently proposed, energy use associated with operation of the future residences would consist of uses such as indoor and outdoor lighting, household appliances, and other electronics. However, electricity supplied to the project by PG&E would comply with the State's Renewable Portfolio Standard (RPS), which 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 and to 60 percent by 2030. Thus, a portion of the energy that would be consumed by the future residences would originate from renewable sources.

Energy use associated with operation of the proposed project would be typical of residential land uses, requiring electricity for interior and exterior building lighting, ventilation, and air conditioning (HVAC), electronic equipment, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. 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 ensures that the proposed structures consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting.

The El Dorado County General Plan also includes energy conservation initiatives designed to reduce energy demand through home weatherization programs, green building guidelines, and alternative energy policies that would reduce energy use through supporting appropriate renewable energy projects and encouraging energy recovery projects. Compliance with the CBSC and applicable General Plan policies would ensure that the building energy use associated with the project would not be wasteful, inefficient, or unnecessary.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as

discussed in Section XVII, Transportation, of this IS/MND, the proposed project would not result in a significant impact related to vehicle miles traveled (VMT).

Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a ***less-than-significant*** impact would occur.

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

Discussion

ai-ii. Based on historical seismic activity and fault and seismic hazards mapping, El Dorado County is considered to have relatively low potential for seismic activity, and is located beyond the highly active fault zones of the coastal areas of California. In addition, according to the County's General Plan EIR, active faults have not been identified within the County. Furthermore, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and the project site is not within a currently established California Earthquake Hazard Zone for surface fault rupture hazards.[14] Therefore, the potential for surface rupture due to faulting occurring beneath the site is considered low.

Nonetheless, the potential exists for the project site to be subject to seismic ground shaking. However, the proposed project would be subject to all applicable regulations within the CBSC, as adopted and amended by Chapter 110.16 (Building Code) of the County's Code of Ordinances, which provides standards to protect property and public safety by regulating the design and construction of foundations, building frames, and other building elements. Conformance with the foregoing engineering standards would ensure that the future on-site residences would not be subject to adverse impacts related to seismic hazards.

[14] California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/. Accessed August 2025.

Based on the above, the proposed project would not directly or indirectly cause substantial adverse effects involving rupture of a known earthquake fault or strong seismic ground shaking, and a ***less-than-significant*** impact would occur.

aiii,aiv, c,d. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence are discussed in detail below. The following is based primarily on a Geotechnical Feasibility Study prepared for the project site by Youngdahl Consulting Group, Inc. (Youngdahl) (see Appendix F).[15]

Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

According to the California Geological Survey (CGS), the project site is not located within a liquefaction zone. In addition, as part of the Geotechnical Feasibility Study prepared for the project, Youngdahl excavated 14 exploratory test pits to evaluate the near surface soils and depth to bedrock, as well as the liquefaction potential of the site. Subsurface soils consist of a thin layer of soil overlying bedrock; some of the soil conditions in the exploratory test pits consisted of a thin layer of silty sand underlain by a layer of clay, subsequently underlain by bedrock. Youngdahl determined that due to the anticipated 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 is negligible. As such, significant impacts related to liquefaction are not anticipated to occur.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. While the project site does generally slope down to the southwest from a ridge to the northeast, according to the Geotechnical Feasibility Study, the site does not contain, and is not adjacent to, any steep or unstable slopes. In addition, the Geotechnical Engineering Study states that existing on-site slopes were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and lack of apparent tension cracks or slump blocks in the slope face. Thus, landslides are unlikely to occur on- or off-site as a result of the proposed project.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the

[15] Youngdahl Consulting Group, Inc. *Geotechnical Feasibility Study For Rancho Victoria Subdivision – 4250 Victoria Way Shingle Springs, California.* March 2022.

bottom of the exposed slope. The project site does not contain open faces within a distance that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to affect the site is low.

Subsidence and Expansive Soils

When subsurface earth materials move, the movement can cause the gradual settling or sudden sinking of ground. The phenomenon of settling or sinking ground is referred to as subsidence, or settlement. Expansive soils are soils which undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted, potentially resulting in damage to building foundations.

As discussed above, while the majority of on-site soils are considered to be generally non-plastic, and, thus, are non-expansive, the clays that underlie potions of the site were determined to have a very high potential for expansion. Additionally, Youngdahl determined that on-site soils are expected to be soft to medium stiff, which tend to be subject to subsidence when subjected to additional loading. As noted above, the County has adopted the CBSC in Chapter 110.16 (Building Code) of the County Code. The CBSC's accepted engineering practices require special design and construction methods for dealing with expansive soils. The two most common methods to prevent damage from expansive soils are to design the building's foundation to resist soil movement and to control surface drainage in order to reduce seasonal fluctuations in soil moisture. Without implementation of such design methods to reduce the potential for damage from unstable soil conditions, including subsidence and expansive soils, a potentially significant impact could occur.

Conclusion

Based on the above discussion, the proposed project is not anticipated to result in potential hazards or risks related to liquefaction, landslides, or lateral spreading. However, potential risks could occur related to subsidence and being located on expansive soil. As such, while the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, landslides, or lateral spreading; however, the potential exists for the project to 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 subsidence, collapse, and/or expansive soils. Therefore, a ***potentially 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.

VII-1. *Prior to final design approval and issuance of building permits for each parcel, the property owner shall submit a design-level geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer to the El Dorado County Planning and Building Department, for 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.

Prior to issuance of any building permits for each parcel, the foundation and improvement plans shall incorporate design-level recommendations. All foundation and improvement plans shall be reviewed and approved by the El Dorado County Planning and Building Department prior to issuance of any building permits.

b. During grading activities associated with future development of the proposed project, and prior to overlaying of the ground with impervious surfaces and landscaping elements, topsoil would be exposed temporarily. Thus, the potential exists for wind and water to erode portions of the exposed topsoil during construction, which could adversely affect downstream storm drainage facilities. Pursuant to Chapter 110.14 (Grading, Erosion, and Sediment Control) of the County Code, any grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained therein. As such, the proposed project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. In addition, pursuant to Chapter 8.79 (Stormwater Quality) of the County Code, as part of compliance with the Construction General Permit, the County may require development and/or redevelopment projects to incorporate appropriate BMPs to control the volume, rate, and potential pollutant loading of stormwater runoff from such development. The required BMPs may be contained in any land use entitlement, conditions of approval, grading plans, improvement plans, or any construction or building-related permit to be issued relative to such development or redevelopment. Incorporation of such BMPs would further ensure substantial adverse effects to downstream storm drainage facilities do not occur as a result of substantial soil erosion or the loss of topsoil.

Based on the above, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a ***less-than-significant*** impact would occur.

e. Although the installation of new utility infrastructure is not included as part of the proposed project, future residential development of the undeveloped parcels would require installation of new septic systems to establish sewer services to each individual parcel that would be subject to new development. The existing single-family residence would continue to be served by the existing on-site septic system. As part of the On-Site Sewage Disposal Study prepared for the proposed project by Wheeldon Geology (see Appendix G),[16] soil samples were collected up to eight feet below the ground surface (bgs) throughout the site to determine percolation potential. The percolation test data indicated slow permeability of on-site soils. Therefore, Wheeldon Geology determined that wastewater disposal system infiltration fields and replacement areas can be designed on-site due to adequate soil conditions, including that groundwater would be more than 7.5 feet bgs. In addition, Wheeldon Geology concluded that groundwater quality would be

[16] Wheeldon Geology. *Onsite Sewage Disposal Study for the Proposed Rancho Victoria Subdivision*. December 13, 2007.

protected from contamination by a combination of weathering surface rocks and adherence to the setbacks required by the El Dorado County Division of Environmental Health and the RWQCB. Furthermore, on-site septic systems associated with future residential development of the project site would be required to comply with all applicable regulations for liquid waste disposal included within Chapter 110.32 (Onsite Wastewater Treatment Systems) of the County Code. Therefore, a ***less-than-significant*** impact would occur related to having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

f. Paleontological resources are the fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. The County's General Plan indicates that known paleontological resources do not exist within the County planning area. While paleontological finds could occur in river and stream gravel deposits within the County, the County's General Plan EIR determined it is unlikely that paleontological resources would be found within the County. Furthermore, the project site does not contain any unique geologic features. As such, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and a ***less-than-significant*** impact would occur.

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

a,b. Emissions of greenhouse gas (GHG) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e$/yr).

In recognition of the global scale of climate change, California has enacted several pieces of legislations in an attempt to curb GHG emissions. Specifically, AB 32 and, more recently, Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), approved in 2008 and updated in 2014, 2017, and 2022,[17] which provides the outline for actions to reduce California's GHG emissions and achieve the emissions reduction targets required by AB 32 and SB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reduction targets, including AB 32 and SB 32.

The EDCAQMD has not formally adopted thresholds for evaluating GHG emissions, but has recommended the use of thresholds adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD).[18] As such, this GHG analysis has been

[17] California Air Resources Board. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022.

[18] Rania Serieh, Air Quality Engineer at El Dorado County Air Pollution Control District. Personal Communication [phone] with Briette Shea, Associate/Air Quality Technician at Raney Planning & Management, Inc. October 22, 2020; Personal Communication [email] with Karen Huss, Air Quality Specialist at Raney Planning & Management, Inc. August 31, 2023.

prepared to show compliance with SMAQMD's GHG thresholds of significance.[19] For construction related GHG emissions, SMAQMD has adopted a threshold of significance of 1,100 $MTCO_2e$/yr. For evaluating operational GHG emissions, SMAQMD has prepared a two-tiered framework of analysis for new projects. All development projects are required to implement Tier 1 measures (BMP 1 and 2). In addition, if operations of the proposed project would exceed 1,100 $MTCO_2e$/yr after implementation of the Tier 1 measures, then the project is required to implement Tier 2 measures (BMP 3). The Tier 1 and Tier 2 measures are presented below.

The 1,100 $MTCO_2e$/yr numerical threshold used by SMAQMD is a screening level threshold that has been established as a universally accepted threshold throughout the State, with several other air districts, including the Placer County Air Pollution Control District (PCAPCD), which also has jurisdiction of a portion of the MCAB, having adopted the same 1,100 $MTCO_2e$/yr numerical threshold. In any case, SMAQMD has further included requirements to implement BMPs, as presented below, to reduce operational GHG emissions associated with new development. The SMAQMD BMPs are consistent with the Statewide CARB GHG reduction targets, including the 2045 target of carbon neutrality established by Executive Order (EO) B-55-18 (AB 1279), by focusing on reducing GHG emissions related to natural gas and vehicle trips, which are widespread sources of GHG emissions. Therefore, while other approaches may be used in other areas of the State, and even by other development projects within the County, to reduce GHG emissions, for the reasons stated above, use of the SMAQMD GHG thresholds for the proposed project is appropriate. The SMAQMD BMPs are also consistent with guidance from other agencies, including the Governor's Office of Planning and Research (OPR).

Tier 1

All projects within SMAQMD's jurisdiction would be required to comply with the BMPs included in Tier 1. The proposed Tier 1 BMPs are as follows:

- ***BMP 1:*** No natural gas: Projects shall be designed and constructed without natural gas infrastructure.
- ***BMP 2:*** Electric vehicle (EV) ready: Projects shall meet the current California Green Building Code (CalGreen) Tier 2 standards, except all EV Capable spaces shall instead be EV Ready.

If a project would not comply with both of the foregoing BMPs, the project would be required to include features that would achieve an equivalent level of GHG emissions reductions. For instance, a project that includes natural gas infrastructure may include pre-wiring to allow for the future retrofit of all natural gas appliances with all-electric appliances. Furthermore, projects that are below OPR's *de minimis* VMT criteria, and/or projects that emit less than 1,100 $MTCO_2e$/yr prior to implementation of BMP 1 and BMP 2 would be considered sufficiently small to screen out of further requirements, and would be assumed to result in a less-than-significant impact related to GHG emissions and climate change. Projects that are not small enough to screen out of further review are subject to review under Tier 2 of SMAQMD's updated Thresholds.

The following types of projects would be considered to be below the OPR's *de minimis* VMT criteria:

[19] Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 6: Greenhouse Gas Emissions.* February 2021.

- Projects (including office, residential, retail, and mixed-use developments) proposed within half a mile of an existing major transit stop or within a quarter of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact;
- 100 percent affordable residential development in infill locations be presumed to have a less-than-significant impact on VMT;
- Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact; and
- Local-serving retail developments (considered to be less than 50,000 square feet in size).

Tier 2

The second tier of SMAQMD's updated thresholds includes the following BMP:

- ***BMP 3***: Residential projects shall achieve a 15 percent reduction in VMT per resident, and office projects should achieve a 15 percent reduction in VMT per worker compared to existing average VMT per capita for the county, or for the city if a more local SB 743 target has been established. Retail projects should achieve no net increase in total VMT, as required to show consistency with SB 743. These reductions can be achieved by many strategies, such as:

    - Locate in an area that already has low VMT due to location, transit service, etc.;
    - Adopt California Air Pollution Officers Association (CAPCOA) measures;
    - Adopt measures noted in Sacramento's Climate Action Plan (CAP) checklist;
    - Join a Transportation Management Association;
    - Incorporate traffic calming measures;
    - Incorporate pedestrian facilities and connections to public transportation; and/or
    - Promote electric bicycles or other micro-mobility options.

As noted in SMAQMD's Guidance, for jurisdictions with SB 743 targets already established, projects that show consistency with those established targets would show consistency with the SMAQMD GHG targets. For El Dorado County, the 15 percent reduction goal for residential projects would remain applicable for the proposed project.

If a project cannot incorporate the foregoing BMPs, other reductions or purchasing and retiring of GHG/carbon offsets can be used as an alternative method of compliance. Additionally, while the all electric requirement in SMAQMD's BMP 1 has not been challenged and is consistent with guidance from other agencies, the Ninth Circuit recently held that the Energy Policy and Conservation Act expressly preempted an ordinance banning natural gas piping within new buildings for appliances covered by the Act unless narrow exceptions applied.[20] While that Ninth Circuit decision does not address mitigation measures or GHG emissions thresholds, a similar challenge could be brought forth in the future and a future court decision could find that all-electric mitigation requirements or GHG emissions thresholds are similarly preempted for covered appliances. The feasibility of BMP 1 also relies on the adequate availability of electricity at the time of development.

[20] *California Restaurant Association v. City of Berkeley* (9th Cir. 2023) 65 F.4th 1045, opinion modified (9th Cir. 2024) 89 F.4th 1094, rehearing and request for En banc hearing denied on January 2, 2024.

GHG emissions resulting from construction and operations of the proposed project were modeled using the CalEEMod emissions model under the same assumptions as discussed in Section III, Air Quality, of this IS/MND. All modeling results are included as Appendix A.

Construction Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project's construction GHG emissions have been estimated and compared to the threshold of significance. The estimated unmitigated maximum annual construction-related emissions from the proposed project are presented in Table 5.

Table 5
Maximum Unmitigated Construction GHG Emissions

	GHG Emissions ($MTCO_2e$/yr)
Project Emissions	183.00
SMAQMD Threshold	**1,100.00**
Exceeds Threshold?	**NO**
Source: CalEEMod, May 2025 (see Appendix A).	

As shown in the table, maximum emissions related to construction of the proposed project would not exceed the applicable threshold of significance. Therefore, project construction would not be considered to result in a cumulatively considerable contribution to global climate change.

Operational GHG Emissions

The estimated unmitigated maximum annual operational emissions from the proposed project are presented in Table 6. The proposed project's compliance with the SMAQMD's BMPs is discussed in further detail below.

Table 6
Unmitigated Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	**Project Emissions**
Mobile	104
Area	5.57
Energy	16.4
Water	0.53
Waste	1.23
Refrigerants	0.02
Total Annual GHG Emissions	*128*
SMAQMD Threshold	**1,100.00**
Exceeds Threshold?	**NO**
Note: Rounding may result in small differences in summation.	
Source: CalEEMod, May 2025 (see Appendix A).	

BMP-1: No Natural Gas

In order to be consistent with BMP 1, the proposed project is required to include all electric appliances and plumbing. However, the proposed project is anticipated to be built with natural gas infrastructure, as indicated by the project applicant. Although the future property owners could proposed not to use natural gas, for conservative purposes, this analysis assumes that the proposed project would use natural gas and, thus, alternative methods, such as pre-wiring to allow for the future retrofit of all natural gas appliances with all-electric appliances and purchase off-site mitigation credits, would be required in order to adequately offset the GHG emissions resulting from natural gas and ensure compliance with BMP-1. Therefore, with implementation of Mitigation Measure VIII-1 the proposed project would comply with BMP-1.

As discussed above, the potential exists that a challenge could be brought forth in the future, and a future court decision could find that all-electric mitigation requirements or GHG emissions thresholds are preempted for covered appliances. The feasibility of BMP 1 also relies on the adequate availability of electricity at the time of development.

BMP-2: EV-Ready

Consistent with BMP-2, the proposed project would be required to provide EV Ready parking spaces at the ratio with which the current CalGreen Tier 2 standards require EV Capable spaces (see Table 7). To be consistent with BMP-2, the proposed project would be required to implement a listed raceway within each single-family home to accommodate a dedicated 208/40-volt branch circuit. Compliance with BMP-2 would be ensured by Mitigation Measure VIII-1.

BMP-3: VMT Reduction

As noted above, the project would be required to implement BMPs 1 and 2. However, as discussed above, projects that emit less than 1,100 $MTCO_2e$/yr prior to implementation of BMP 1 and BMP 2 would be considered sufficiently small to screen out of further requirements, and would be assumed to result in a less-than-significant impact related to GHG emissions and climate change. As shown in Table 6, maximum annual GHG emissions from operations of the proposed project were quantified and would equal approximately 128 $MTCO_2e$/yr. Therefore, even without the implementation of BMP 1 and BMP 2, emissions would be below 1,100 $MTCO_2e$/yr, and implementation of BMP 3 would not be required.

Conclusion

Based on the information presented above, the proposed project would not be considered to generate GHG emissions during construction that would have a significant impact on the environment. However, project consistency with SMAQMD BMP-1 and BMP-2 cannot be ensured at this time. Therefore, the proposed project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project could result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***potentially significant***.

Table 7
EV Ready Parking Space Requirements

Land Use Type	Requirements for New Construction		
1-2 family dwelling units/townhouses[1]	Each dwelling unit shall have a listed raceway to accommodate a dedicated 208/40-volt branch circuit		
Nonresidential[2]	**Total Number of Parking Spaces**	**EV Capable Spaces**	**EVSE Spaces**
	0-9	3	0
	10.25	8	3
	26-50	17	6
	51-75	28	9
	76-100	40	13
	101-150	57	19
	151-200	79	26
	201 and over	45 percent of actual parking spaces	33 percent of EV Ready Spaces

Sources:
1. 2022 CalGreen Code Section A4.106.8.1.
2. 2022 CalGreen Code Table A5.106.5.3.3.

Mitigation Measure(s)

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

VIII-1. *The following requirements shall be noted on project improvement plans for each parcel, subject to review and approval by the El Dorado County Planning Services Department:*

- *The proposed project shall be designed such that each parcel is built all-electric, and natural gas infrastructure shall be prohibited on-site; and*
- *Each parcel shall be constructed to include electric vehicle (EV) ready parking spaces at the ratio with which the current CalGreen Tier 2 standards require EV Capable spaces.*

If the use of all-electric for any project component(s) (e.g., an appliance) is not enforceable or commercially feasible at the time of issuance of building permit, the property owner shall be required to include pre-wiring to allow for the future retrofit of all natural gas appliances with all-electric appliances and purchase off-site mitigation credits or forecasted mitigation units ("FMUs") (collectively, "GHG credits") for project-related GHG emissions from the component(s) using natural gas instead of electric. The emissions from the use of natural gas shall be calculated by a qualified professional using EDCAQMD-, CARB-, or the USEPA-approved emissions models and quantification methods available and submitted to the County for review and approval, which shall include third-party review by a qualified consultant of the County's selection and be subject to property owner reimbursement of consultant costs.

Any and all GHG credits to off-set for the use of natural gas must be created through a CARB-approved registry. These registries are currently the ACR,

CAR, and Verra, although CARB may accredit additional registries in the future. These registries use robust accounting protocols for all GHG credits created for their exchange, including the six currently approved CARB protocols. This mitigation measure specifically requires GHG credits created for the project originate from a CARB-approved protocol or a protocol that is equal to or more rigorous than CARB requirements under 17 CCR 95972. The selected protocol must demonstrate that the GHG-emissions reductions are real, permanent, quantifiable, verifiable, enforceable, and additional. Definitions of these terms from 17 CCR 95802(a) are provided below.

(1) Real: GHG reductions or enhancements result from a demonstrable action or set of actions and are quantified using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources, GHG sinks, and GHG reservoirs within the [GHG credit] project boundary and account for uncertainty and the potential for activity-shifting and market-shifting leakage.
(2) Additional: GHG reductions or removals that exceed any GHG reduction, or removals otherwise required by law, regulation, or legally binding mandate, and that exceed any GHG reductions or removals that would otherwise occur in a conservative BAU scenario.
(3) Permanent: GHG reductions and removal enhancements are not reversible or, when GHG reductions and GHG-removal enhancements may be reversible, mechanisms are in place to replace any reversed GHG-emission reductions and GHG-removal enhancements to ensure that all credited reductions endure for at least 100 years.
(4) Quantifiable: The ability to accurately measure and calculate GHG reductions or GHG-removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the [GHG credit] project boundary, while accounting for uncertainty. activity-shifting, and market-shifting leakage.
(5) Verifiable: A [GHG credit] project report assertion is well-documented and transparent such that it lends itself to an objective review by an accredited verification body.
(6) Enforceable: The authority for CARB to hold a particular party liable and take appropriate action if any of the provisions of this article are violated. Note that this definition of enforceability is specific to the Cap-and-Trade regulation, where CARB holds enforcement authority, but this measure will employ GHG credits from the voluntary market, where CARB has no enforcement authority. Applying the definition to this mitigation measure means that GHG reductions must be owned by a single entity and backed by a legal instrument or contract that defines exclusive ownership.

Geographic Prioritization of GHG Credits
GHG credits from reduction projects in the County will be prioritized before projects in larger geographies (i.e., northern California, California, United States, and international). The property owner will inform brokers of the required geographic prioritization for the procurement of GHG credits. GHG credits from reduction projects identified in the County that are of equal or

lesser cost compared to the settlement price of the latest Cap-and-Trade auction must be included in the transaction. GHG credits from reduction projects outside of the County may be purchased if adequate credits cannot be found in the County or if they exceed the maximum price identified above. The economic and geographic analysis undertaken to inform the selection of GHG credits must be provided by the property owner to the County as part of the required documentation discussed below under Plan Implementation and Reporting.

Types of GHG Credits
GHG credits may be in the form of GHG offsets for prior reductions of GHG emissions verified through protocols or FMUs for future committed GHG emissions meeting protocols. Because emissions reductions from GHG offsets have already occurred, their benefits are immediate and can be used to compensate for an equivalent quantity of project-generated emissions at any time. GHG credits from FMUs must be funded and implemented within 5 years of project GHG emissions to qualify as a GHG credit under this measure (i.e., there can only be a maximum of 5 years lag between project emissions and their real-world reductions through funding a FMU in advance and implementing the FMU on the ground). Any use of FMUs that result in a time lag between project emissions and their reduction by GHG credits from FMUs must be compensated through a prorated surcharge of additional FMUs proportional to the effect of the delay. Because emissions of CO_2 in the atmosphere reach their peak radiative forcing within 10 years, a surcharge of 10 percent for every year of lag between project emissions and their reduction through a FMU will be added to the GHG credit requirement (i.e., 1.10 FMUs would be required to mitigate 1 metric ton of project GHG emissions generated in the year prior to funding and implementation of the FMU).

Verification and Independent Review of GHG Credits
All GHG credits will be verified by an independent verifier accredited by the ANSI National Accreditation Board (ANAB) or CARB, or an expert with equivalent qualifications to the extent necessary to assist with the verification. Following the standards and requirements established by the accreditation board (i.e., ANAB or CARB), the verifier will certify the following.

- *GHG credits conform to a CARB-approved protocol or a protocol that is equal to or more rigorous than CARB requirements under 17 CCR 95972. Verification of the latter requires certification that the credits meet or exceed the standards in 17 CCR 95972.*
- *GHG credits are real, permanent, quantifiable, verifiable, enforceable, and additional, as defined in this measure.*
- *GHG credits are purchased according to the geographic prioritization standard defined in this measure under Geographic Prioritization of GHG Credits.*

Verification of GHG offsets must occur as part of the certification process for compliance with the accounting protocol. Because FMUs are GHG credits that will result from future projects, additional verification must occur beyond initial certification is required. Verification for FMUs must include initial certification and independent verification every 5 years over the

duration of the FMU generating the GHG credits. The verification will examine both the GHG credit realization on the ground and its progress toward delivering future GHG credits. The property owner will retain an independent verifier meeting the qualifications described above to certify reductions achieved by FMUs are achieved following completion of the future reduction project.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	✖	☐
b. 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?	☐	☐	✖	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	✖
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	✖	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	✖
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	☐	☐	✖	☐

Discussion

a. Residential developments are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. On-site maintenance may involve the use of common household cleaning products, fertilizers, and herbicides, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a ***less-than-significant*** impact would occur.

b. The proposed project's potential effects related to the likely release of hazardous materials through existing site conditions and/or construction activities are discussed in detail below.

Construction Activities

Although development of the site is not currently proposed, future 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. 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),[21] 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, the El Dorado County Environmental Management Department [EDCEMD]) 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 EDCEMD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

Site Conditions

A development project could 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 should a site contain potential Recognized Environmental Conditions (RECs) that are not properly addressed prior to project implementation. 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 indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

According to a review of historic aerial photographs dating back to 1985, with the exception of the existing on-site residence, the project site has remained undeveloped, consistent with existing conditions; the existing on-site residence was developed subsequent to 2005. Prior to 1985, the project site was generally used for grazing livestock. As such, the project site has not been subject to past uses that would result in future development of the proposed project to have the potential to 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. Therefore, a ***less-than-significant*** impact would occur.

c. The nearest school to the project site is the Millers Hill School, located approximately 0.5-mile south of the site. Therefore, the proposed project would have ***no impact*** related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. The California Environmental Protection Agency (CalEPA) has compiled a list of data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements, pursuant to Government Code 65962.5. The components of the Cortese List include the Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List, the list of leaking underground storage tank (UST) sites from the State Water Resources Control Board's (SWRCB's) GeoTracker database, the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the State Water Resources Control Board (SWRCB).[22] The project site is not included on the DTSC

[21] 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.

[22] CalEPA. *Cortese List Data Resources*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed October 2022.

Hazardous Waste and Substances Site List[23] or the list of solid waste disposal sites. In addition, the project site is not included on the list of leaking UST sites from the SWRCB's GeoTracker database, or the list of active CDO and CAO from the SWRCB.[24] Thus, the proposed project would not create a significant hazard to the public or the environment, and a ***less-than-significant*** impact would occur.

e. The nearest public airport to the site is Cameron Park Airport, which is located approximately eight miles north of the site. As such, the project site is not located within two miles of any public airports, and does not fall within an airport land use plan area. Therefore, ***no impact*** would occur related to the project being located within an airport land use plan or within two miles of a public airport or public use airport, thereby resulting in a safety hazard or excessive noise for people residing or working in the project area.

f. During future construction of the proposed project and off-site improvements, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the County that could be used as evacuation routes during emergency events. The project would not substantially alter existing circulation systems in the surrounding area. As a result, the project would have a ***less-than-significant*** impact with respect to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, areas at risk for wildland fires are typically in or on the edge of undeveloped areas with large amounts of combustible vegetation. According to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is located within a High Fire Hazard Severity Zone (FHSZ).[25] However, as discussed in further detail in Section XX, Wildfire, of this IS/MND, with implementation of Mitigation Measures XX-1 and XX-2, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, and a ***less-than-significant*** impact would occur.

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[23] Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed August 2025.

[24] State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento#. Accessed August 2025.

[25] California Department of Forestry and Fire Protection. *FHSZ Viewer.* Available at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed August 2025.

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

Discussion

a. The following discussion provides a summary of the proposed project's potential to violate water quality standards/waste discharge requirements or otherwise degrade water quality during construction and operation.

Construction

During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality. More specifically, as discussed in Section IV, Biological Resources, of this IS/MND, multiple aquatic resources are present on-site; without implementation of BMPs, potential erosion associated with future project buildout could impact such resources.

Construction activities that disturb one or more acres of soil are required to comply with the provisions established by the NPDES Construction General Permit. The proposed project would subdivide the 513.93-acre project site into eight parcels ranging in size from 40 to 219.58 acres and could include future development of seven new on-site residences. Therefore, because future development of the aforementioned parcels facilitated by the proposed project would disturb one or more acres of land, future development of the parcels would be subject to the requirements set forth by the NPDES Construction General Permit. As part of compliance with the Construction General Permit, project

applicants would be required to file a Notice of Intent (NOI) with the Central Valley RWQCB and prepare a SWPPP prior to the commencement of construction activities. Development of the SWPPP would include plans to treat stormwater runoff in accordance with the standards of the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment. In addition, pursuant to Section 8.79.100 of the El Dorado County Code, any person subject to any individual and/or industrial NPDES stormwater discharge permit must comply with all provisions of said permit, SWPPP, and any regulations or ordinances promulgated thereto. Furthermore, in accordance with the Construction General Permit and El Dorado County Code Section 8.79.130, 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 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 NPDES Construction General Permit and Chapter 8.79 of the County Code, as described above, would minimize the potential degradation of stormwater quality and downstream surface water associated with future construction of the proposed project. In addition, BMPs would be required to be designed in accordance with the CASQA Stormwater BMP Handbook for New Development and Redevelopment. However, because a SWPPP has not yet been prepared for the proposed project, proper compliance with the aforementioned regulations cannot be ensured at this time, and the proposed project's construction activities could violate water quality standards or waste discharge requirements or otherwise degrade water quality. As such, a potentially significant impact could occur.

Operation

Residential uses do not typically involve operations associated with the generation or discharge of polluted water. Thus, project operations would be unlikely to violate any water quality standards or waste discharge requirements, nor degrade water quality. However, following future development of the project site, impervious surfaces on the subdivided parcels could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities could release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported through stormwater runoff from the parcels to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, household pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed and provide a more lucrative means of transport for pollutants to enter the waterways.

The unincorporated portion of El Dorado County's west slope is covered under a Phase II Small Municipal Separate Storm Sewer System (MS4) NPDES General Permit, which became effective on July 1, 2013. Projects subject to the requirements of the Phase II MS4 NPDES General Permit include those that create or replace 5,000 sf or more of impervious surface. As previously discussed, the proposed project would subdivide the

513.93-acre project site into eight parcels ranging from 40 acres to 219.58 acres. Regulated projects, such as the proposed project, are required to implement the standard site design measures found in Section E.12.b of the MS4 NPDES General Permit. Future development of the project site would be required to comply with applicable NPDES permit requirements, which may include treatment of stormwater prior to the water leaving the site or entering a waterbody, submittal of an Erosion and Sediment Control Plan, and/or other requirements, as applicable. Given compliance with the aforementioned requirements, operation of the proposed project would not violate water quality standards or waste discharge requirements or otherwise degrade water quality.

Based on the above, the proposed project would not include land uses typically associated with the generation or discharge of polluted water, and compliance with all applicable standards and regulations would ensure that the project would be designed to adequately treat stormwater runoff from the site prior to discharge. However, a SWPPP has not yet been prepared for the project. Without preparation of a SWPPP, proper implementation of BMPs cannot be ensured at this time, and the project's construction activities could result in an increase in erosion, and consequently affect water quality. Therefore, a ***potentially significant*** impact related to water quality and waste discharge requirements could occur.

Mitigation Measure(s)

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

X-1. *Prior to issuance of grading permits for each parcel, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The Developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges consistent with the requirements established in 110.14: Grading, Erosion, and Sediment Control of the County's Municipal Code. The SWPPP shall be submitted to the County Planning and Building Department at time of grading and building permit submittal for review and approval by the County and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

b,e. Water supply for the existing on-site single-family residence is currently provided by an on-site well. Although development of the project site is not currently proposed, future buildout of the site would include the installation of a well within each of the remaining seven parcels to serve each of the proposed single-family residences. As discussed further in Section XIX, Utilities and Service Systems, of this IS/MND, adequate water supply is available to serve future on-site residential development. In addition, given that the proposed project is consistent with the site's land use and zoning designations, residential development of the site has been generally anticipated by the County in the General Plan EIR. As such, the potential impact of future installation of impervious surfaces on-site on groundwater recharge has been anticipated by the County. Furthermore, large portions of each proposed parcel would remain undeveloped, and the

proposed project would include the preservation of approximately 149 acres of on-site oak woodland habitat, which would continue to facilitate groundwater recharge on-site.

According to the Well Completion Report for the proposed well within Parcel A-1, the static water level is at approximately 25 feet bgs, which consists of fractured rock.[26] As such, well water within the project site would be drawn from a fractured rock aquifer, rather than a continuous aquifer. A fractured rock aquifer consists of a body of rock where groundwater is stored and transmitted through a network of fractures and cracks. Because the groundwater source associated with the proposed wells would be limited to an isolated fractured rock aquifer, the proposed project would not be expected to affect the water supply of other existing nearby wells.

Based on the above, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin, and would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, a ***less-than-significant*** impact would occur.

c.i-iii. Future residential development of the project site would result in additional impervious surfaces that could alter the existing drainage pattern of the site and increase the rate of surface runoff. All future development would be required to be designed in accordance with the applicable provisions of the NPDES Phase II MS4, which contains the requirements for drainage design. In addition, with incorporation of the Low-Impact Development (LID) features designed and installed in compliance with applicable standards set forth by the CASQA Stormwater BMP Handbook for New Development and Redevelopment, future peak flows exiting the site would be required not to increase under post-project condition.

Nonetheless, without the preparation of a drainage report to verify the adequacy of a final drainage system design, future development of the project site could create or contribute runoff water that would exceed the proposed on-site storm drainage system's capacity, provide substantial sources of polluted runoff, or redirect flood flows. Therefore, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

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

X-2. *As part of the Improvement Plan submittal process for each parcel, a Drainage Report shall be prepared by a Registered Civil Engineer that includes pre- and post-development hydrology calculations, as well as calculations for required treatment areas to ensure that the on-site drainage systems comply with the El Dorado County Stormwater Management Plan (SWMP) and the NPDES Phase II MS4 General Permit, and any other applicable regulations at the time of permit issuance. The drainage report shall be submitted to the El Dorado County Planning and Building Department and the County Engineer for review and approval.*

[26] El Dorado County Community Development Agency, Environmental Management Division. *Well Completion Report*. May 10, 2024.

civ. According to the Federal Emergency Management Agency (FEMA) floodplain maps 06017C0950E and 06017C0975E, effective September 26, 2008, the project site is located within an Area of Minimal Flood Hazard (Zone X), which is not identified as a Special Flood Hazard Area.[27] Thus, the proposed project would not include development within a Special Flood Hazard Area and would not be subject to project-specific design features related to flood hazards. Therefore, development of the project would not impede or redirect flood flows, and a ***less-than-significant*** impact would occur.

d. Impacts related to development within a flood hazard zone are discussed under Question 'civ', above. Tsunamis are defined as sea waves created by undersea fault movement, whereas a seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. The project site is not located within the vicinity of an ocean or a large closed body of water. Thus, the project site would not be exposed to flooding risks associated with tsunamis or seiches. Therefore, ***no impact*** would occur with development of the project.

[27] Federal Emergency Management Agency. *Flood Insurance Rate Maps 06017C0950E and 06017C0975E*. Available at: https://msc.fema.gov/portal/search?AddressQuery=Latrobe%2C%20CA. Accessed August 2025.

XI. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	✖
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	✖	☐

Discussion

a. 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. Surrounding existing uses include undeveloped land and oak woodland to the north; the El Dorado Trail Access Point, Latrobe Cemetery, and undeveloped land to the east; single-family residences and El Dorado Hills Fire Station 91 further east, across Latrobe Road; single-family residences and Millers Hill School to the south; and single-family residences and undeveloped land to the west. The proposed project would be consistent with the existing residential uses in the project area. In addition, the project site, as well as a large portion of the surrounding area, is currently undeveloped and, thus, the project would not physically divide an established community. Therefore, ***no impact*** would occur.

b. The El Dorado County General Plan designates the site as RR and the site is zoned RL-40. The proposed project would include a Tentative Subdivision Map to subdivide the project site into eight parcels, seven of which are anticipated to be developed with new single-family residences in the future; the existing single-family residence within Parcel A-5 would be retained. As such, the proposed project would be consistent with the site's existing General Plan land use and zoning designations. Furthermore, as discussed throughout this IS/MND, the proposed project would not result in any significant environmental effects that cannot be mitigated to a less-than-significant level by the mitigation measures provided herein, and would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. Thus, a ***less-than-significant*** impact would occur.

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

Discussion

a,b. According to the General Plan EIR, documented mineral resources within the County include gold, silver, copper, nickel, chromite, zinc, tungsten, mercury, titanium, platinum, and iron. Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board overseas the Mineral Resource Zone (MRZ) classification system. The MRZ system characterizes both the location and known/presumed economic value of underlying mineral resources. Local agencies are required to use the classification information when developing land use plans and making land use decisions. Historically, numerous mining operations have occurred throughout El Dorado County; however, only 16 regulated mines are currently active in the County that have been assigned a California Mine ID number. Of these, eight are active, five have been reclaimed, two are idle, and one has been closed. None of the foregoing mining operations are located within or in the vicinity of the project site. Furthermore, the project site is not designated as a mineral resource recovery site by the County. Therefore, ***no impact*** to mineral resources would occur as a result of development of the project.

XIII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	✖	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	✖	☐
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?	☐	☐	☐	✖

Discussion

a. The following discussion is based primarily on information from an Environmental Noise Assessment (ENA) prepared for the proposed project by Saxelby Acoustics (Saxelby) (Appendix H).[28] The following sections present information regarding sensitive noise receptors in proximity to the project site, the existing noise environment, and the potential for the proposed project to result in impacts during project construction and operation. The following terms are referenced in the sections below:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to decibels (dB) in this report will be A-weighted unless noted otherwise.
- Day-Night Average Level (L_{dn}): The average sound level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours.
- Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
- Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.

Sensitive Noise Receptors

Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. In the vicinity of the project site, sensitive land uses include Millers Hill School to the south of the project site and existing single-family residential uses located west and south of the project site. One existing single-family home is located on Parcel A-5 of the project site.

Existing Noise Environment

The ambient noise environment in the project vicinity is primarily defined by traffic on Latrobe Road to the east of the project site. Saxelby conducted a continuous noise measurement survey to quantify the existing ambient noise environment at the project site

[28] Saxelby Acoustics. *Environmental Noise Assessment Latrobe Road Subdivision Project, El Dorado County, California.* January 28, 2022.

on January 20, 2022; the noise measurement location (LT-1) is shown in Figure 6. Table 8 below provides a summary of the noise measurement results during daytime (7:00 AM to 7:00 PM) and nighttime hours (10:00 PM to 7:00 AM).

Table 8
Existing Background Noise Measurement Data (dBA)

L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
68	67	53	83	61	35	80
Source: Saxelby Acoustics, 2022.						

Standards of Significance

Both the County's Municipal Code and General Plan include regulations related to the generation of noise. With respect to construction noise, General Plan Policy 6.5.1.11 establishes that construction noise occurring in rural regions such as the project area that exceed the standards outlined in Table 9 shall be considered significant. However, such construction noise standards shall not apply as long as such construction occurs between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM on weekends and on federally-recognized holidays.

Table 9
Maximum Allowable Noise Exposure for Non-Transportation Noise Sources in Rural Regions – Construction Noise

Land Use Designation1	Time Period	Noise Level (dB)	
		L_{eq}	L_{max}
All Residential (LDR)	7:00 AM-7:00 PM	50	60
	7:00 PM-10:00 PM	45	55
	10:00 AM-7:00 AM	40	50
Commercial, Recreation, and Public Facilities (C, TR, PF)	7:00 AM-7:00 PM	65	75
	7:00 PM-7:00 AM	60	70
Rural Land, Natural Resources, Open Space, and Agricultural Lands (RR, NR, OS, AL)	7:00 AM-7:00 PM	65	75
	7:00 PM-7:00 AM	60	70

The Noise Element of the County's General Plan establishes a land use compatibility criterion of 60 dB L_{dn} or less within outdoor activity areas of residential land uses impacted by transportation noise sources (e.g. traffic noise) and 45 dB L_{dn} or less within interior spaces of residential land uses. Ambient increase standards are set forth by El Dorado County General Plan Policy 6.5.1.12, which establishes that where existing or projected future traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5.0 dBA L_{dn} caused by a new transportation noise source will be considered significant. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3.0 dBA L_{dn} caused by a new transportation noise source will be considered significant. Lastly, where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise source will be considered significant.

Figure 6
Noise Measurement Site

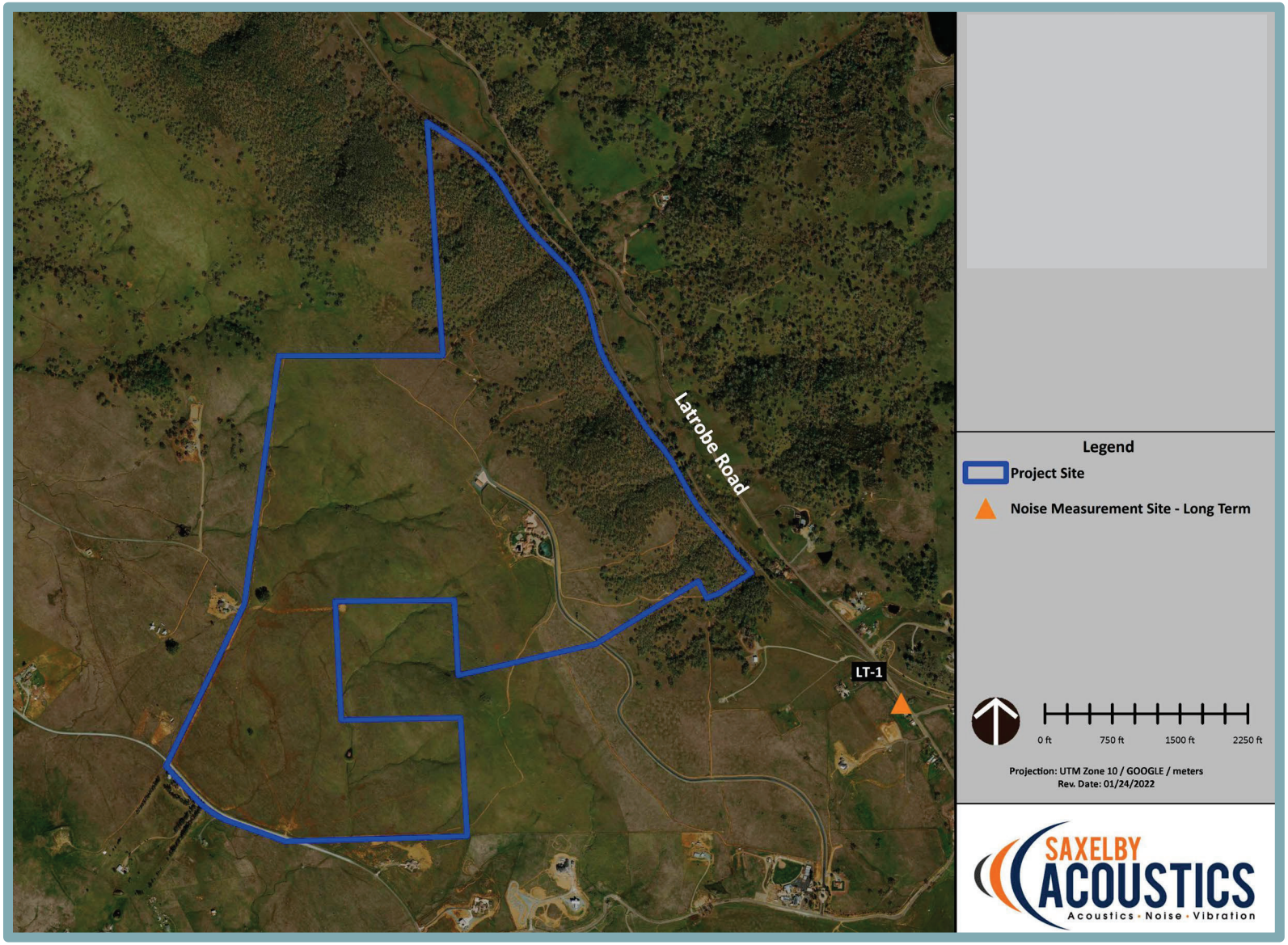

*Figure not OCR compatible.

Furthermore, General Plan Policy 6.5.1.7 requires stationary (non-transportation) noise sources to be below 55 L_{eq} during daytime hours, and 40 L_{eq} during nighttime hours at residential land uses in rural regions. Ambient increase standards are set forth by El Dorado County General Plan Policy 6.5.1.13, which establishes that where ambient noise levels are in accordance with the foregoing standards, increases in ambient noise levels caused by new non-transportation noise sources that exceed 5.0 dBA shall be considered significant, and where ambient noise levels are not in accordance with the foregoing standards, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3.0 dBA shall be considered significant.

Impact Analysis

The following sections provide an analysis of potential noise impacts associated with construction and operation of the proposed project.

Construction Noise

During future construction of the proposed project, including the development of roads and water and wastewater infrastructure, heavy-duty equipment would be used for grading, excavation, paving, and building construction, which would result in temporary noise level increases while in operation. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, and dump trucks would be used on-site. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Table 10 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

Table 10
Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. January 2006

The closest noise-sensitive receptor to the proposed project site would be located approximately 140 feet from the site's western boundary. Saxelby determined that construction noise levels at the nearest single-family residence would range from 32 to 46 dBA L_{eq} and 52 to 66 dBA L_{max}. As such, construction noise associated with buildout of

the project site could exceed the 60 dBA L_{max} construction noise level limit established for residential uses in the General Plan. In addition, due to the limited noise-generating uses in the project site vicinity, the existing ambient noise levels at the nearest sensitive receptors are anticipated to be low. Thus, this analysis conservatively assumes that temporary construction noise generated by future buildout of the project site could result in a temporary increase in noise levels at the nearby sensitive receptors in excess of the standards established by El Dorado County General Plan Policy 6.5.1.13. As stated in General Plan Policy 6.5.1.11 and Chapter 130.37 of the County Code, the standards outlined in Table 9 do not apply to noise levels generated by construction activities that occur between 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM on weekends and on federally-recognized holidays. Nonetheless, because future construction associated with the proposed project is conservatively anticipated to temporarily increase ambient noise levels in excess of the applicable standards, construction noise associated with the proposed project could result in a potentially significant impact.

Project Operational Noise

Due to the residential nature of the proposed project, noise-generating operations associated with the proposed project would primarily consist of project-generated traffic and landscaping maintenance and HVAC equipment. The landscaping maintenance and HVAC systems would be typical of residential uses. Assuming the project HVAC systems and maintenance equipment would be in normal working order, such stationary noise sources associated with the proposed project would not substantially increase noise levels from what currently exists in the project area. In addition, due to the low number of residential units anticipated to be developed on-site, the proposed project would not result in new vehicle trips such that a significant increase in traffic noise would occur. Therefore, operation of the proposed project is not anticipated to generate noise levels in excess of existing ambient noise levels, or in excess of the County's exterior noise standards.

Conclusion

As described above, the proposed project would not result in the 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. However, construction activities associated with project implementation could result in a substantial temporary increase in ambient noise levels in the vicinity of the project, and a ***potentially 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.

XIII-1. *Prior to approval of any permits authorizing construction on the project site, the property owner shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the El Dorado County Planning and Building Department. The noise management measures may include but are not necessarily limited to the following:*

- *Construction activities shall be limited to 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM on weekends and on federally-recognized holidays. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Chief Building Official and/or County Engineer, and shall not be allowed on any date or time that would violate the County's applicable noise standards.*
- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.*
- *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.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *If deemed warranted by the construction noise management plan, a minimum six-foot-tall temporary construction sound wall shall be constructed along the project boundary adjacent to existing noise-sensitive receptors. The sound barrier fencing should consist of ½-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The barriers should be free from gaps, openings, or penetrations to ensure maximum performance. This temporary construction sound wall shall be constructed prior to any ground-disturbing activities associated with construction.*
- *The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator*

shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

The above noise management measures shall be included in the grading plan submitted by the developer of each parcel for review and approval by the El Dorado County Planning and Building Department prior to grading permit issuance.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception of the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. 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. Table 11, which was developed by the California Department of Transportation (Caltrans), shows the vibration levels that would normally be required to result in damage to structures.

As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

During future project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of construction. The range of vibration source levels for typical construction equipment are shown in Table 12. As shown therein, construction vibration levels anticipated for future on-site development would be less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors that could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located further than 26 feet from typical construction activities. Therefore, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Based on the above, the proposed project would not expose people to or generate excessive groundborne vibration or groundborne noise levels, and a ***less-than-significant*** impact would occur.

Table 11
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling – houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.

Table 12
Vibration Levels for Various Construction Equipment (in/sec)

Type of Equipment	Peak Particle Velocity at 25 feet	Peak Particle Velocity at 50 feet	Peak Particle Velocity at 100 feet
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/Drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/Roller	0.210 (less than 0.20 at 26 feet)	0.074	0.026

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018.

c. The nearest public airport to the site is Cameron Park Airport, which is located approximately eight miles north of the site. As such, the project site is not located within two miles of any public airports. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels, and ***no impact*** would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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)?	☐	☐	✖	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✖

Discussion

a. The proposed project includes the subdivision of the 513.93-acre project site into eight parcels and future development of seven single-family residences. The El Dorado County General Plan designates the project site as RR and the site is zoned RL-40. Future on-site residential development would be consistent with the site's existing General Plan land use and zoning designations. As such, future development of the project site with residential uses, as well as the associated increase in population, has been anticipated and analyzed in the General Plan EIR. Furthermore, based on the County's average person per household of 2.83, the seven single-family residences would only generate a population increase of approximately 20 residents, assuming all on-site residents are new to the County.[29] Therefore, a significant increase in population would not occur as a result of project buildout.

   Population growth itself does not constitute an environmental impact; rather, increased demands on the physical environment resulting from increases in population are considered environmental impacts. For example, increased demands on County services could require system upgrades, the construction of which could have environmental impacts. Physical environmental effects associated with development of the proposed project are evaluated throughout this IS/MND. While the project would result in population growth, such growth could be accommodated by existing public services and infrastructure and would not result in significant adverse environmental effects. Therefore, the project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a ***less-than-significant*** impact would occur.

b. While the project site is developed with an existing single-family residence and associated ancillary structures, the project would not include the removal of such development. In addition, the remaining portions of the project site proposed for future residential development are currently vacant. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere, and ***no impact*** would occur.

[29] U.S. Census Bureau. *El Dorado County, California*. Available at: https://data.census.gov/profile/El_Dorado_County,_California?g=050XX00US06017#families-and-living-arrangements. Accessed September 2025.

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

Discussion

a. The El Dorado Hills Fire Department (EDHFD) currently provides fire protection services to the project site and the surrounding 30,000-acre service area with five stations and has a total of 83 personnel, including 65 firefighters, as well as paramedics, chief officers, fire prevention specialists, training officers, fleet maintenance personnel and administrative staff. The nearest fire station to the project site is Fire Station 91, located at 7660 South Shingle Road, approximately 3,000 feet east of the site.

Given the proximity of the nearest fire station to the project site, EDHFD staff would be able to respond to emergency situations within the project site in an adequate amount of time. In addition, as discussed above, the proposed project would be consistent with the site's existing General Plan land use and zoning designations and, thus, any increase in demand for fire protection services has been anticipated by the County. Furthermore, the EDHFD confirmed in a communication with the County that the Department would be able to serve the proposed project with existing facilities.[30]

Pursuant to the Board of Supervisors' Resolution No. 170-2021, the EDHFD collects a fire impact fee for new development within the service area. All fees shall be paid to the EDHFD prior to the issuance of the building permit by all new residential development within the District. Funds collected through the fire impact fees would contribute to the maintenance and operation of existing fire protection service facilities.

Finally, all structures included in the proposed project would be constructed consistent with the California Building Code (CBC) and California Fire Code (CFC). In compliance with the CBC, the design of all buildings would include the installation and use of automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to CFC requirements. Fire flow for the proposed project would be provided by the proposed water system that would be developed on-site. In addition, the State Minimum Fire Safe Regulations include, but are not limited to, regulations pertaining to the provision of basic emergency access; signing and building numbering; private water supply reserves for emergency fire use; vegetation modification; fuel breaks; and the provision of undeveloped ridgelines. 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

[30] Bianca Dinkler, Project Planner, El Dorado County Planning Department. Personal communication [letter] with Chrishana Fields, Fire Marshal, El Dorado Hills Fire Department. April 27, 2023.

site. Additionally, as discussed in further detail in Section XX, Wildfire, of this IS/MND, implementation of Mitigation Measures XX-1 and XX-2 would ensure the proposed project's compliance with all applicable State and County regulations related to reducing wildfire risk.

Based on the above, the proposed project is not expected to cause significant degradation to response times or service ratios for the EDHFD, which would induce the need for physically altered or expanded governmental facilities for fire protection services, and the project would result in a ***less-than-significant*** impact.

b. Law enforcement is provided to the project site by the El Dorado County Sheriff's Office (EDCSO). The EDCSO serves an approximately 1,762-square-mile region that encompasses a population of approximately 190,000. EDCSO is made up of the South Lake Tahoe patrol and the West Slope patrol, the latter of which would serve the project site. The West Patrol EDCSO office is located in the City of Placerville, at 200 Industrial Drive. In addition to the two patrols, three EDCSO substations are located in Cameron Park, El Dorado Hills, and Georgetown. The closest substation to the project site is located at 4355 Town Center Boulevard, approximately 6.5 miles northwest of the site.

As stated above, while future buildout of the project site would result in an increase in population and an associated increase in demand for law enforcement services, the population increase of 20 people associated with the proposed project would be minimal. In addition, the increase in law enforcement service demand from development of the project site has been included in the County's demand predictions based on anticipated General Plan buildout. Therefore, 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.

c. The project site is located within the Latrobe School District. The nearest school to the project site is Millers Hill School, located approximately 2,000 feet southeast of the site. Although development of the site is not currently proposed, future residential development would be anticipated to generate additional students in the area. However, pursuant to the Latrobe School District 2023 to 2024 Annual Accounting Report, new residential development is required to pay development impact fees to help pay for new school facilities; the fee is currently set at $3.15 per sf for all residential construction.[31] According to SB 50, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996[b]). Therefore, according to SB 50, the payment of the necessary school impact fees for the project would be full and satisfactory CEQA mitigation.

Because the project applicant would be required to pay development fees to the Latrobe School District, the proposed project would result in a ***less-than-significant*** impact regarding an increase in demand for schools.

d,e. Parks and recreation services within the County are provided by the County's Parks and Recreation Department. While park facilities are not present in the project site vicinity, the

[31] Latrobe School District. *Collection and Accounting for Developer Fees*. November 19, 2024.

El Dorado Trail access point is located immediately east of the site. In addition, the proposed project would include the preservation of the existing on-site oak woodland habitat. The proposed project is consistent with the site's General Plan land use and zoning designations. As such, buildout of the site, including associated demand on parks, has been anticipated by the County and analyzed in the General Plan EIR. See Section XVI, Recreation, of this IS/MND for further discussion.

The El Dorado County Library provides library services to all County residents throughout County Service Areas (CSAs). The County operates six locations in Cameron Park, El Dorado Hills, Georgetown, Placerville, Pollock Pines, and South Lake Tahoe. The nearest library to the project site is the Cameron Park Library located at 2500 Country Club Drive, approximately 6.4 miles north of the project site. While future buildout of the project site could result in an increase in demand for library services, due to the small increase in population associated with the proposed project, existing library facilities would be sufficient to meet such demand.

Based on the above, the project would result in a ***less-than-significant*** impact related to parks and other public facilities.

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

Discussion

a,b. The proposed project is located within and would be provided recreation services by the El Dorado Hills Community Services District. As discussed in Section XIV, Population and Housing, the proposed project could include the future development of seven single-family residences, which is anticipated to house approximately 20 residents. As such, while the proposed project could result in an increase in use of existing parks in the site vicinity, such an increase would not be considered significant. Based on the County's requirement of five acres of park land per 1,000 residents, the proposed project would be required to provide a minimum of approximately 0.1-acre of parks and recreation areas (20 estimated residents x 0.005 acres/resident). Future residents of the project could be served by existing and proposed open spaces in the site vicinity, such as the El Dorado Trail access point, which is located immediately east of the project site, as well as the 149 acres that would be preserved on-site as open space. Nonetheless, because the proposed project does not include a formally dedicated park space, the project would not meet County parkland requirements, and payment of fees in lieu of parkland dedication would be required. Therefore, pursuant to Section 120.12.090 of the County Code, payment of an in lieu parkland fee would be required.

Park impact fees imposed by the County would generate revenue to acquire necessary land to develop new parks or rehabilitate existing neighborhood parks and recreation facilities reasonably related to serve the subdivision. Given payment of the applicable fees, the proposed project would not result in substantial physical deterioration of any existing neighborhood or regional parks or other recreational facilities, and would not result in adverse physical effects related to the construction or expansion of new facilities, and a ***less-than-significant*** impact would occur.

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

Discussion

a. The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Previously, lead agencies used a performance metric entitled 'level of service' (LOS) to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Enacted as part of SB 743 (2013), PRC Section 21099(b)(1), directed the Governor's Office Land Use and Climate Innovation (LCI), formerly the Office of Planning and Research, to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018. It became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' (VMT) refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact."[32]

Please refer to Question 'b' for a discussion of VMT.

Pedestrian, Bicycle, and Transit Facilities

The proposed project's potential impacts related to pedestrian, bicycle, and transit facilities are discussed below.

Pedestrian and Bicycle Facilities

Due to the rural nature of the project site and adjacent areas, pedestrian and bicycle facilities are limited. Apart from the El Dorado Trail Access Point, which is a Class I

[32] Subdivision (b)(2) of Section 15064.3 ("transportation projects") provides that "[t]ransportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152."

Shared-Use path located east of the site that extends northeast to Diamond Springs, the surrounding area lacks other pedestrian and bicycle amenities. In addition, pursuant to the El Dorado County Active Transportation Plan, other pedestrian and bicycle infrastructure facilities are not planned in the project site vicinity. As such, buildout of the proposed project would not conflict with a program, plan, ordinance, or policy addressing pedestrian and bicycle facilities. Furthermore, due to the low number of residences anticipated to be constructed on-site, the proposed project would not create a significant demand for pedestrian or bicycle facilities in the site vicinity.

Transit Facilities

El Dorado Transit is the primary public transit service provider in El Dorado County. El Dorado Transit services extend within and between communities throughout the County, including connections into the City of Folsom and limited commuter service to the City of Sacramento. Transit facilities do not exist in the project site vicinity; new transit facilities, such as bus stops, are not planned nor proposed near the project site. Similar to the above, due to the low number of residences anticipated to be constructed on-site, the proposed project would not create a significant demand for transit facilities in the site vicinity. Therefore, buildout of the proposed project would not conflict with a program, plan, ordinance, or policy addressing transit facilities.

Conclusion

Based on the above, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and a ***less-than-significant*** impact could occur.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. El Dorado County adopted standards and thresholds for VMT analysis through Resolution 141-2020.

Pursuant to the VMT thresholds established in Resolution 141-2020, a presumption of a less-than-significant impact may be made for projects that generate or attract less than 100 trips per day. Based on the relevant Institute of Transportation Engineers (ITE) Trip Generation Rates, the proposed project is anticipated to generate six vehicle trips in the AM peak hour, eight trips in the PM peak hour, and a total of approximately 76 daily trips. Therefore, the proposed project is anticipated to generate fewer than 100 trips per day, and a less-than-significant VMT impact would occur.

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)(2), and a ***less-than-significant*** impact would occur.

c,d. Although the proposed project includes alterations to South Shingle Road and Settler's Trail, all such improvements would be required to comply with local, State, and federal standards, which would ensure that the alterations to the existing transportation network would not result in hazards due to a geometrical design feature. Furthermore, during project construction, public roads in the vicinity would remain open and available for use by emergency vehicles and other traffic.

As part of future development that would be facilitated by the proposed project, access to Parcels A-5, A-6, A-7 and A-8 would be provided by Victoria Way. Victoria Way currently grants access to the existing single-family residence within Parcel A-5; the roadway would be extended north a short distance to give access to the other aforementioned parcels, ending in a cul-de-sac. Beyond the cul-de-sac, an EVA route would extend to the site's northern boundary, where EVA route would connect to a new roadway along the site's western boundary within a 50-foot wide common access and PUE. Access to Parcels A-1, A-2, A-3, and A-4 would be provided by the new westerly road within the 50-foot wide common access/PUE, which would connect to Settler's Trail. The new road from Settler's Trail would consist of two 12-foot-wide paved travel lanes. The proposed project would also realign a portion of Victoria Way in the proximity of the existing single-family residence within Parcel A-5; the realigned portion of Victoria Way would be constructed to include two 12-foot-wide paved travel lanes, consistent with the dimensions of the existing roadway.

The foregoing internal roadways would be designed consistent with applicable El Dorado County design standards and would provide adequate width and turn radii at and along all driveways and parking aisles to allow for two-way circulation, including circulation of larger vehicles such as emergency trucks, garbage trucks, and delivery trucks. Emergency vehicles would have sufficient maneuvering space to turn around within the project site's proposed roadway network.

Based on the above, the proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and would not result in inadequate emergency access. Therefore, a ***less-than-significant*** impact would occur.

XVIII. TRIBAL CULTURAL RESOURCES. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	✖	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	✖	☐	☐

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, the Cultural Resources Study prepared for the proposed project by Historic Resource Associates confirmed the presence of previously recorded archaeological resources (P-09-0034I/CA-ELD-253, P-09-001247/CA-ELD-000974, and P-09-000342) within the project site. Two of the previously recorded archaeological sites confirmed by the Cultural Resources Study are located within Parcel A-5 of the proposed Tentative Subdivision Map, which is not proposed for development; as such, the archaeological sites within Parcel A-5 would not be impacted by the proposed project.

In compliance with AB 52, on March 16, 2023, the County provided formal notification letters to the Shingle Springs Band of Miwok Indians, UAIC, and Wilton Rancheria. While the Shingle Springs Band of Miwok Indians did not request consultation, both UAIC and Wilton Rancheria responded with requests to consult. UAIC and Wilton Rancheria are federally recognized tribes and sovereign nations with longstanding traditional and cultural ties to the project area. Both Tribes participated in the consultation process, including review of ethnographic literature, historic maps, and tribal and agency records to inform identification of tribal cultural resources. Both UAIC and Wilton Rancheria also requested a site survey and participated in consultation regarding appropriate treatment measures.

Wilton Rancheria conducted site-specific field investigations of the project area as part of the consultation process. Wilton Rancheria completed an on-site survey and identified additional previously unrecorded tribal cultural resources, for which the Tribe prepared Department of Parks and Recreation (DPR) 523 forms and submitted to the NCIC. One previously unrecorded tribal cultural resource identified during the site survey lies outside of the project site and, therefore, would not be impacted by the proposed project.

UAIC subsequently deferred to Wilton Rancheria for consultation and mitigation recommendations, stating that it would be in accord with any recommendations provided by Wilton Rancheria regarding the treatment and protection of tribal cultural resources. Wilton Rancheria's site-specific recommendations informed the mitigation measures incorporated herein, which reflect the Tribe's concerns regarding long-term protection and

access to preserved tribal cultural resources, as addressed through the enforceable measures set forth below.

Furthermore, pursuant to Mitigation Measure XVIII-1, as set forth below, all previously recorded and newly identified resources, as well as a 100-foot buffer around each, would be preserved and deed-restricted in perpetuity as non-disturbance areas, as identified on the Tentative Subdivision Map prepared for the proposed project (see Figure 3, ESAs, or Environmentally Sensitive Areas), thereby ensuring that the resources would not be impacted by any future on-site residential development.

In addition to the individual resources identified on the project site and in the vicinity, Ben Bolt Ridge, which is located generally parallel to and west of Latrobe Road and is the main dividing ridge between the valley floor and the lower Sierra Nevada foothills, could be considered a Traditional Cultural Property (TCP). Historic Resource Associates prepared a Cultural Resources Memorandum for the proposed project, which provides site records and documents the Ben Bolt Ridge TCP.[33] According to the Cultural Resources Memorandum, Ben Bolt Ridge between South Shingle Road to the south and the Deer Creek drainage to the north formed an important physical feature that played a vital role in precontact-era history as both a trail or possible trade route connecting the Deer Creek drainage with the North Fork of the Cosumnes River, as well as a spiritual location. Historic Resource Associates noted that the Ben Bolt Ridge TCP, as a potential cultural landscape, does not include specific boundary markers other than the physical or geological formation that forms the ridgeline. However, the Ben Bolt Ridge TCP generally intersects with the project site, particularly within the eastern portion of Parcel A-5, Parcel A-8, and the proposed Oak Preservation Area. Although the tribal cultural resources present on-site could be contributing factors towards the Ben Bolt Ridge TCP, implementation of the mitigation measures contained herein would ensure that the identified tribal cultural resources would not be impacted by the proposed project and, thus, potential impacts to the overall cultural landscape would not occur.

Based on the presence of known tribal cultural resources on-site and in the vicinity, the potential exists for the proposed project to result in a substantial adverse change in the significance of a tribal cultural resource during grading or other ground-disturbing activities. Thus, a ***potentially significant*** impact to tribal cultural resources could occur.

Mitigation Measure(s)

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

XVIII-1. *The Environmentally Sensitive Areas (ESAs) shown on the Tentative Subdivision Map (see Figure 3 of this IS/MND), which include a 100-foot buffer around each known resource(s), shall be preserved in perpetuity and deed restricted as non-disturbance areas. If construction activities would occur within 100 feet of an ESA, protective fencing or other methods acceptable to the County shall be installed along the boundaries of the ESA prior to the commencement of construction and shall remain throughout the construction period. The requirements of this measure shall be noted on all grading plans, subject to review and approval by the El Dorado County Planning and Building Department. Proof of compliance with this measure*

[33] Historic Resource Associates. *Ben Bolt Ridge TCP Study and Site Record*. August 12, 2025.

shall be provided to the El Dorado County Planning and Building Department. The recorded deed restriction shall expressly provide that preservation of ESAs as non-disturbance areas does not prohibit reasonable access by the culturally affiliated Tribe for cultural, ceremonial, stewardship, or monitoring purposes, provided such access does not involve ground-disturbing activities and is coordinated for safety purposes where applicable, and the landowner and any successor in interest shall not deny or unreasonably restrict such access when conducted in accordance with this mitigation measure. Such access shall not constitute development or construction and shall not be deemed inconsistent with the non-disturbance requirements of this mitigation measure. No public access rights are created by this provision.

XVIII-2. *Prior to commencement of any ground-disturbing activities on each parcel, the property owner shall coordinate with Wilton Rancheria regarding notification procedures, protection measures, and treatment protocols for tribal cultural resources that may be encountered during construction, and shall ensure that tribal cultural monitoring is conducted during ground-disturbing activities associated with the project, including, but not limited to grading, excavation, trenching, and utility installation.*

Tribal monitoring shall be conducted by a monitor designated by Wilton Rancheria and shall be arranged by emailing the Wilton Rancheria Department of Cultural Preservation at cpd@wiltonrancheria-nsn.gov. The tribal monitor shall have the authority to observe ground-disturbing activities and to temporarily halt work in the immediate area of a discovery if known or suspected tribal cultural resources are encountered, pending implementation of appropriate treatment and protection measures in coordination with Wilton Rancheria.

There shall be a minimum of one tribal monitor for each separate area of ground-disturbing activity located at least 30 meters (100 feet) apart, unless otherwise agreed upon in writing between Wilton Rancheria and the property owner.

In the event that tribal cultural resources or Native American human remains are discovered, work shall cease in the vicinity of the discovery and the procedures set forth in this IS/MND and applicable State law shall be followed in consultation with the culturally affiliated Tribe.

XVIII-3. *If any suspected TCRs, including but not limited to cultural features, midden/cultural soils, artifacts, exotic rock (non-native), shell, bone, shaped stones, or ash/charcoal are discovered by any person during construction activities, including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an alternative distance agreed upon based on the project area and nature of the find. The project contractor shall immediately notify the El Dorado County Planning and Building Department and Wilton Rancheria, who shall determine if the find is a TCR (PRC Section 21074) and make recommendations for further evaluation and treatment as necessary.*

The culturally affiliated Tribe shall consult with the County to (1) identify the boundaries of the TCR; (2) where feasible, identify appropriate preservation in place and avoidance measures, including redesign or adjustments to construction methods, and long-term management; or 3) where avoidance is infeasible, identify an appropriate reburial location in proximity to the discovery that shall be permanently protected from future disturbance through a deed restriction, conservation easement, or other legally enforceable mechanism acceptable to the County and the culturally affiliated Tribe.

Permanent curation of TCRs shall not occur unless approved in writing by the culturally affiliated Tribe.

If reburial is requested by the culturally affiliated Tribe, priority shall be given first to reburial in the same location as discovered, only deeper, where feasible. If reburial in the same location is not feasible, priority shall next be given to reburial in an appropriate location within close proximity of the original discovery (generally within 100 feet), in an area protected from future subsurface disturbance. If neither option is feasible, the culturally affiliated Tribe shall identify an alternative appropriate reburial location that shall be protected from future subsurface disturbance.

The construction contractor(s) and El Dorado County shall facilitate the respectful reburial of culturally sensitive soils or objects, upon request by the Tribe, including preparation and excavation of the reburial location and assistance with reburial, consistent with the Tribe's preferences. The property owner shall be responsible for reasonable costs associated with reburial.

If requested by the culturally affiliated Tribe, the property owner and construction contractor shall facilitate reasonable access and accommodation for religious or ceremonial practices conducted by the Tribe in connection with the treatment, removal, or reburial of Native American human remains and/or associated funerary objects, consistent with the American Indian Religious Freedom Act (42 U.S.C. §§ 1996–1996a) and Executive Order 13007. The nature and details of such practices shall remain confidential and under the sole discretion of the Tribe.

If directed by the culturally affiliated Tribe, and consistent with the Tribe's monitoring protocols or agreement, the construction contractor(s) shall provide secure, on-site storage for culturally sensitive soils or objects that are components of TCRs recovered during construction. Only Tribal Representatives shall have access to such storage. Storage size and method shall be determined by the Tribe based on the nature of the Tribal Cultural Resource and may range from a small locked container to a secure fenced area or shipping container, as appropriate.

Work at the TCR discovery location shall not resume until authorization is granted by the Lead Agency in coordination with the culturally affiliated Tribe.

XVIII-4. *Prior to initiation of any ground-disturbing activities on each parcel, all on-site personnel associated with the project shall receive tribal cultural resources sensitivity training approved by Wilton Rancheria.*

The training shall address, at a minimum, the potential for encountering tribal cultural resources, the importance of such resources, and procedures to be followed in the event that a potential tribal cultural resource is identified during construction activities.

The property owner shall coordinate with Wilton Rancheria regarding the content and timing of the training. Training may be conducted by Wilton Rancheria or its designated representative.

XVIII-5. *Implement Mitigation Measures V-1 and V-2.*

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	✖	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	✖	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	✖	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	✖	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	✖	☐

Discussion

a-c. Wastewater treatment, water supply, stormwater drainage, electric power, natural gas, and telecommunications facilities necessary to serve the proposed project are described in the following sections.

Wastewater Infrastructure

Installation of new utility infrastructure is not included as part of the proposed project. However, future development of the undeveloped parcels of the project site would include the installation of septic systems to serve each of the proposed residences. According to the On-Site Sewage Disposal Study prepared for the proposed project by Wheeldon Geology (see Appendix G),[34] field test data and individual site evaluations indicate that the proposed parcels have adequate soil conditions for installation of standard septic tank infiltration trench systems. As such, the project site soil characteristics are suitable for the proposed septic infrastructure. In addition, Wheeldon Geology determined that groundwater will be protected from contamination from wastewater disposal by a combination of the weathering of surface rocks and compliance with the applicable requirements of the County Division of Environmental Health and the RWQCB. Therefore, adequate wastewater infrastructure would be available to serve buildout of the project site, and development of the proposed septic system would not result in environmental impacts beyond those analyzed throughout this IS/MND.

[34] Wheeldon Geology. *Onsite Sewage Disposal Study for the Proposed Rancho Victoria Subdivision*. December 13, 2007.

Water Supply

As discussed previously, the proposed project would include the installation of new water wells on the proposed parcels, each of which would serve a single-family residence that is proposed for development. Installation of all proposed on-site wells would be required to comply with the standards established in Chapter 8.39, Well Construction and Water Supply Standards, of the County Code. Given compliance with the foregoing requirements, future installation of on-site wells would not result in any adverse environmental impacts beyond those analyzed throughout this IS/MND. Furthermore, the El Dorado County Environmental Management Department (EMD) reviewed the proposed project and determined that adequate groundwater supply would be available to serve the proposed parcels during normal, dry, and multiple dry years.[35] Therefore, a less-than-significant impact would occur related to construction of new or expanded water supply facilities.

Stormwater Drainage

As previously discussed, the project site is mostly undeveloped, consisting of rolling topography featuring a mosaic of grassland areas, oak woodlands, and seasonal drainages that trend eastward towards Latrobe Road. While future development of the project site would increase site runoff due to the introduction of impervious surfaces to the site, the majority of the site would continue to consist of pervious surfaces. In addition, as discussed in further detail in Section X, Hydrology and Water Quality, of this IS/MND, the proposed project would be required to comply with all applicable regulations associated with the County's Phase II MS4 NPDES General Permit. With the incorporation of the LID features designed and installed in compliance with applicable standards set forth by the CASQA Stormwater BMP Handbook for New Development and Redevelopment, future buildout of the project site would include adequate on-site stormwater management infrastructure to manage all runoff from the proposed impervious surfaces. Thus, the project would not require new or expanded off-site stormwater infrastructure, and the proposed project would not generate runoff in excess of the County's existing stormwater system's capacity.

Electric Power, Natural Gas, and Telecommunications

The proposed project would not include connections to existing gas or telecommunications facilities in the project vicinity, and would not require development of such infrastructure off-site. However, the proposed project would include connections to existing PG&E electricity infrastructure in the site vicinity. Thus, substantial expansion of off-site utilities would not be required to serve the proposed residential development, and associated environmental effects would not occur.

Conclusion

Based on the above, 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. In addition, sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and adequate wastewater

[35] Bianca Dinkler, Project Planner, El Dorado County Planning Department. Personal communication [letter] with Bryan Vyverberg, Supervising R.E.H.S., El Dorado County Environmental Health Department. June 10, 2024.

treatment capacity will be available to serve the project's projected demand. Thus, a ***less-than-significant*** impact would occur.

d,e. Solid waste and recycling collection services would be provided to the proposed project by El Dorado Disposal Inc. (EDD), which provides residential, commercial, and construction collection services for unincorporated areas within El Dorado County. Solid waste collected by EDD is ultimately disposed of at Potrero Hills Landfill, located in Suisun City, approximately 60 miles southwest of the project site. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Potrero Hills Landfill has a maximum permit capacity of 83,100,000 cubic yards and a remaining capacity of 13,872,000 cubic yards.[36] Due to the substantial amount of available capacity remaining at the landfill serving the County, and because the proposed future residences would not generate significant volumes of solid waste, sufficient capacity would be available to accommodate the project's solid waste disposal needs.

The proposed project would be required to comply with County Ordinance No. 4319, which requires that new development provide areas for adequate, accessible, and convenient storing, collecting, and loading of solid waste and recyclables. Furthermore, pursuant to the CALGreen Code, at least 65 percent diversion of construction waste is required for projects permitted after January 1, 2017. Because the project would only create a temporary increase in the amount of waste during construction activities, the proposed project would not result in a significant impact related to solid waste generation during construction.

Based on the above, 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 and would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, a ***less-than-significant*** impact would occur.

[36] California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details Potrero Hills Landfill (48-AA-0075)*. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591. Accessed September 2025.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	✖	☐	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	✖	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	✖	☐	☐

Discussion

a. According to the CAL FIRE Fire and Resource Assessment Program, the project site is located within a State Responsibility Area (SRA) and is identified as being within a High FHSZ.[37] The following analysis is primarily based on the Wildland Fire Safe Plan (WFSP) prepared for the proposed project by Foothill Resource Management (FRM) (see Appendix I).[38]

As previously discussed, part of future development that would be facilitated by the proposed project, access to Parcels A-5, A-6, A-7 and A-8 would be provided by Victoria Way. Victoria Way currently grants access to the existing single-family residence within Parcel A-5; the roadway would be extended north a short distance to give access to the other aforementioned parcels, ending in a cul-de-sac. Beyond the cul-de-sac, an EVA route would extend to the site's northern boundary, where EVA route would connect to a new roadway along the site's western boundary within a 50-foot-wide common access and PUE. Access to Parcels A-1, A-2, A-3, and A-4 would be provided by the new westerly road within the 50-foot-wide common access/PUE, which would connect to Settler's Trail. The new road from Settler's Trail would consist of two 12-foot-wide paved travel lanes. The proposed project would also realign a portion of Victoria Way in the proximity of the existing single-family residence within Parcel A-5; the realigned portion of Victoria Way would be constructed to include two 12-foot-wide paved travel lanes, consistent with the dimensions of the existing roadway. As discussed in Section XVII, Transportation, of this IS/MND, adequate emergency access would be provided to the project site.

El Dorado County does not currently have an adopted emergency evacuation plan. In the event of a disaster or large-scale incident, the El Dorado County Sheriff's Office of Emergency Services (OES) coordinates the overall response through the Emergency Operations Center (EOC). In the case of a wildfire that would create the need for

[37] California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones*. Available at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed September 2025.

[38] Foothill Resource Management. *Rancho Victoria Subdivision Wildland Fire Safe Plan*. September 4, 2024.

emergency evacuation, future residents of the proposed project would likely evacuate on Latrobe Road to either Highway 50 to the north or State Route 16 to the south. Due to the small increase in population associated with future buildout of the proposed project (approximately 20 new residents), and the fact that the proposed project is anticipated to generate only six vehicle trips in the AM peak hour and eight vehicle trips in the PM peak hour, traffic generated by the proposed project during an emergency situation would be unlikely to impede evacuation of the area.

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.

b,d. According to the WFSP, nine wildfires have occurred in the general vicinity of the project site since 1956, seven of which occurred within four miles of the site, and one which encompassed the project site. Due to the fire history in the project area, in combination with the majority of the area being in the oak savannah fuel type and prevailing southwest winds, FRM determined that the potential exists for a fast-moving destructive wildfire. As such, the potential for the proposed project to expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire due to slope, prevailing winds, and existing on-site fuel sources are addressed below.

Slope

According to the WFSP, slopes on the project site are generally moderate, although some areas of steeper slopes exist within the V-shaped intermittent drainages and in the northeastern corner of Parcel A-1. The proposed parcels are located on west- to southwest-facing slopes of generally moderate topography, and potential building pad locations would not be located on steep slopes. Although some steep slopes occur within the project site, such slopes are limited in size and are not sufficient to facilitate rapid spread of wildfire, as compared to slopes in mountainous areas, which are sufficiently large enough to accommodate rapid spread of wildfire.

Based on the existing topography of the project site, slope would not affect on-site fire behavior, and the proposed project would not exacerbate wildfire risks due to slope. In addition, because the project site is not located in an area of substantial slopes, future on-site development would not have the potential to 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.

Prevailing Winds

The WFSP states that prevailing winds in the project site vicinity are from the southwest coming from Sacramento/San Joaquin Delta influences. North winds and northwest winds descending from the Sierra Nevada can also occur, which are typically dryer than southwest winds. While the average wind speeds in the project area are relatively moderate, the project area can experience gusts greater than 20 miles per hour on occasion. Although the prevailing winds would not exacerbate on-site wildfire risks through the spread of wildfire, the WFSP determined that winds from the north and northeast could result in significant vegetation drying; potential risks associated with on-site vegetation are discussed further below.

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. Pursuant to the WFSP, the hazard rating of the project site is Low to Moderate according to the 2024 International Wildland Urban Interface Code. However, the potential flammability of the on-site vegetation is high after the vegetation has dried in the late spring and summer. The vegetation type on the majority of the project site is composed of fuels that can be rated as having a high rate of spread and a low resistance to control, meaning that although a fire can spread rapidly, fire suppression of the existing on-site fuel type is relatively feasible with ground-based firefighting equipment. Future buildout of the project site with residential uses would reduce the risk of wildland fire to surrounding areas, because site improvements, such as roadways, driveways, and landscaping, would reduce readily combustible vegetation. Additionally, wildfire risks would not be anticipated to be exacerbated during project operation, as the anticipated residential uses typically do not involve operational components that would increase the risk of wildfire. However, during project construction, equipment without appropriate spark arrestors could result in direct flame impingement on combustible materials. Without proper measures to require that construction activities be equipped with CAL FIRE-approved spark arrestors, future on-site construction could result in the ignition of on-site fuel sources.

The proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including EDHFD Ordinance 2022-01, which serves 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 one- and two-family dwellings. In addition, County Code Section 8.09.707(F) sets forth hazardous vegetation abatement standards for improved parcels with which the proposed project would be required to comply. Overall, both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from undeveloped land to the proposed structures, as well as the potential of fire spreading from the site to surrounding areas. Furthermore, consistent with El Dorado County requirements, on-site landscaping would be required to consist of drought-tolerant plants and trees and would incorporate landscaping along local roadways. Installation of landscaping would introduce new fuel sources to the project site. However, as set forth in Section 130.33.010 of the County Code, the landscaping would include irrigation scheduling in accordance with the State's Model Water Efficient Landscape Ordinance, which would ensure the proposed vegetation is sufficiently watered to not result in excessively dry fuel sources.

Because the project site is located within a SRA and a High FHSZ, future development of the proposed project 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.

The WFSP prepared for the proposed project incorporates the requirements established in the regulations discussed above. In addition, implementation of the site-specific recommendations included in the WFSP would further reduce fire risk associated with the proposed project. Such recommendations include, but are not limited to, ensuring that all fences are constructed of non-combustible materials and ensuring that the portion of

Settler's Trail that will provide access to on-site parcels is maintained and repaired by the future owners of the proposed parcels.

Conclusion

Based on the above, while 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, future development of the project site could exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to prevailing winds. Thus, the proposed project could result in a ***potentially significant*** impact related to such.

Mitigation Measure(s)

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

XX-1. *Prior to the approval of Improvement Plans for each parcel, the property owner shall show on the plans via notation the recommendations included in the Wildland Fire Safe Plan prepared for the proposed project by Foothill Resource Management. The property owner shall provide proof of compliance with such recommendations to the El Dorado County Planning and Building Department prior to initiation of construction activities.*

XX-2. *Prior to the approval of Improvement Plans for each parcel, the plans shall include a note requiring CAL FIRE-approved spark arrestors on all construction equipment with internal combustion engines. The property owner shall provide proof of compliance with this measure to the El Dorado County Planning and Building Department, prior to initiation of construction activities.*

c. Future development of the project site would include the installation of various infrastructure components, including roadways, groundwater wells, septic systems, powerlines, 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 County Code requires vegetation clearance next to roadsides to reduce fire hazards. Additionally, through implementation of Mitigation Measure XX-1, future development would be required to implement the recommendations included within the WFSP, which would include the maintenance of roadside vegetation and clearing of potential wildfire fuels in the vicinity of residential structures. Implementation of such recommendations would reduce the potential for fire to occur within the project site and spread to adjacent areas.

Furthermore, as discussed above, structures constructed as part of the proposed project would comply with all applicable standards set forth by the CFC, including the requirement that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings. Therefore, the proposed infrastructure improvements associated with the project would not substantially exacerbate wildfire risk.

While the long-term maintenance of the proposed roadways, water and wastewater infrastructure, 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. 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, compliance with Mitigation Measure XX-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.

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

Discussion

a. As discussed in Section IV, Biological Resources, of this IS/MND, while the potential exists for special-status species to occur on-site, Mitigation Measures IV-1 through IV-4 would ensure that impacts to such species would be less than significant. Similarly, as discussed in Section V, Cultural Resources, and Section XVIII, Tribal Cultural Resources, of this IS/MND, with implementation of Mitigation Measures V-1 and V-2, XVIII-1, and XVIII-2, potential impacts to cultural and tribal cultural resources would be reduced to a less-than-significant level.

Considering the above, the proposed project would not degrade the quality of the environment, substantially reduce or impact the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, a ***less-than-significant*** impact would occur.

b. The proposed project, in conjunction with other development within El Dorado County, could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Code of Ordinance requirements, and other applicable local and State regulations.

Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in El Dorado County, and the project's incremental contribution to cumulative impacts would be ***less than significant***.

c. As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Code of Ordinance requirements, and other applicable local and State regulations, as well as the mitigation measures included herein. In addition, as discussed in the Air Quality, Geology and Soils, Hazards and Hazardous Materials, Greenhouse Gas Emissions, and Noise sections of this IS/MND, the proposed project would not cause substantial effects to human beings, which cannot be mitigated to less-than-significant levels, including effects related to exposure to air pollutants, geologic hazards, GHG emissions, hazardous materials, and excessive noise. As such, the proposed project would not result in direct or indirect impacts to human beings and, thus, the proposed project's impact would be ***less than significant***.

APPENDIX A

AIR QUALITY AND GHG MODELING RESULTS

Rancho Victoria Subdivision Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

3.3. Grading (2026) - Unmitigated

3.5. Building Constructoin (2026) - Unmitigated

3.7. Building Constructoin (2027) - Unmitigated

3.9. Paving (2026) - Unmitigated

3.11. Architectural Coating (2026) - Unmitigated

3.13. Architectural Coating (2027) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Rancho Victoria Subdivision
Construction Start Date	6/1/2026
Operational Year	2027
Lead Agency	El Dorado County
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	9.40
Location	38.559469743288844, -120.98932727841195
County	El Dorado-Mountain County
City	Unincorporated
Air District	El Dorado County AQMD
Air Basin	Mountain Counties
TAZ	401
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	7.00	Dwelling Unit	7.17	13,650	81,990	0.00	18.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.83	3.22	29.2	29.8	0.05	1.24	19.8	21.1	1.14	10.1	11.3	—	5,491	5,491	0.22	0.05	0.70	5,512
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.38	3.15	10.8	14.2	0.03	0.40	0.04	0.44	0.37	0.01	0.38	—	2,584	2,584	0.10	0.03	< 0.005	2,594
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.30	1.20	4.67	6.10	0.01	0.18	0.32	0.50	0.16	0.15	0.32	—	1,100	1,100	0.04	0.01	0.04	1,105
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.24	0.22	0.85	1.11	< 0.005	0.03	0.06	0.09	0.03	0.03	0.06	—	182	182	0.01	< 0.005	0.01	183

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.83	3.22	29.2	29.8	0.05	1.24	19.8	21.1	1.14	10.1	11.3	—	5,491	5,491	0.22	0.05	0.70	5,512

2027	3.32	3.10	10.3	14.2	0.03	0.36	0.04	0.39	0.33	0.01	0.34	—	2,586	2,586	0.10	0.03	0.16	2,596
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.38	3.15	10.8	14.2	0.03	0.40	0.04	0.44	0.37	0.01	0.38	—	2,584	2,584	0.10	0.03	< 0.005	2,594
2027	3.32	3.10	10.3	14.2	0.03	0.36	0.04	0.39	0.33	0.01	0.34	—	2,583	2,583	0.10	0.03	< 0.005	2,593
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.30	1.20	4.67	6.10	0.01	0.18	0.32	0.50	0.16	0.15	0.32	—	1,100	1,100	0.04	0.01	0.04	1,105
2027	0.82	0.77	2.37	3.28	0.01	0.08	0.01	0.09	0.08	< 0.005	0.08	—	595	595	0.02	0.01	0.02	598
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.24	0.22	0.85	1.11	< 0.005	0.03	0.06	0.09	0.03	0.03	0.06	—	182	182	0.01	< 0.005	0.01	183
2027	0.15	0.14	0.43	0.60	< 0.005	0.01	< 0.005	0.02	0.01	< 0.005	0.01	—	98.6	98.6	< 0.005	< 0.005	< 0.005	98.9

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.90	0.86	0.55	3.54	0.01	0.02	0.54	0.56	0.02	0.14	0.16	2.56	917	920	0.30	0.03	2.31	939
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.83	0.79	0.61	2.84	0.01	0.02	0.54	0.56	0.02	0.14	0.16	2.56	870	873	0.30	0.03	0.16	890
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.83	0.79	0.49	2.91	0.01	0.01	0.53	0.54	0.01	0.13	0.15	2.56	751	754	0.30	0.03	1.03	772
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.14	0.09	0.53	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	0.42	124	125	0.05	0.01	0.17	128

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.41	0.38	3.08	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	669	669	0.03	0.03	2.22	681
Area	0.46	0.45	0.12	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	148	148	< 0.005	< 0.005	—	149
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.6	98.6	0.01	< 0.005	—	99.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Waste	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	0.90	0.86	0.55	3.54	0.01	0.02	0.54	0.56	0.02	0.14	0.16	2.56	917	920	0.30	0.03	2.31	939
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.40	0.37	0.44	2.77	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	623	623	0.03	0.03	0.06	633
Area	0.42	0.42	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	147	147	< 0.005	< 0.005	—	148
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.6	98.6	0.01	< 0.005	—	99.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Waste	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	0.83	0.79	0.61	2.84	0.01	0.02	0.54	0.56	0.02	0.14	0.16	2.56	870	873	0.30	0.03	0.16	890
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.36	0.41	2.68	0.01	0.01	0.53	0.53	0.01	0.13	0.14	—	617	617	0.03	0.03	0.94	628
Area	0.43	0.43	0.03	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	33.6	33.6	< 0.005	< 0.005	—	33.7
Energy	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.6	98.6	0.01	< 0.005	—	99.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Waste	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	0.83	0.79	0.49	2.91	0.01	0.01	0.53	0.54	0.01	0.13	0.15	2.56	751	754	0.30	0.03	1.03	772
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.07	0.08	0.49	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	102	102	< 0.005	0.01	0.15	104
Area	0.08	0.08	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.57	5.57	< 0.005	< 0.005	—	5.57
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.3	16.3	< 0.005	< 0.005	—	16.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.07	0.23	0.30	0.01	< 0.005	—	0.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.15	0.14	0.09	0.53	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	0.42	124	125	0.05	0.01	0.17	128

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.0	29.0	< 0.005	< 0.005	—	29.1
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.81	4.81	< 0.005	< 0.005	—	4.82
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	1.03	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	193	193	< 0.005	0.01	0.70	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.0	17.4	0.03	0.65	—	0.65	0.59	—	0.59	—	2,960	2,960	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.05	0.05	0.41	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Dust From Material Movement	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.88	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.60	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.16	4.16	< 0.005	< 0.005	0.01	4.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Constructoin (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.40	3.68	4.85	0.01	0.14	—	0.14	0.13	—	0.13	—	896	896	0.04	0.01	—	899
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.88	< 0.005	0.03	—	0.03	0.02	—	0.02	—	148	148	0.01	< 0.005	—	149
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.7	27.7	< 0.005	< 0.005	0.10	28.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.2	23.2	< 0.005	< 0.005	0.05	24.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.0	25.0	< 0.005	< 0.005	< 0.005	25.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.2	23.2	< 0.005	< 0.005	< 0.005	24.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.54	9.54	< 0.005	< 0.005	0.02	9.67
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.67	8.67	< 0.005	< 0.005	0.01	9.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.58	1.58	< 0.005	< 0.005	< 0.005	1.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.44	1.44	< 0.005	< 0.005	< 0.005	1.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Constructoin (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	2.15	2.96	0.01	0.08	—	0.08	0.07	—	0.07	—	549	549	0.02	< 0.005	—	551
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.9	90.9	< 0.005	< 0.005	—	91.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.09	27.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.8	22.8	< 0.005	< 0.005	0.05	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.6	24.6	< 0.005	< 0.005	< 0.005	24.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.8	22.8	< 0.005	< 0.005	< 0.005	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.74	5.74	< 0.005	< 0.005	0.01	5.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.21	5.21	< 0.005	< 0.005	< 0.005	5.45
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.43	3.43	< 0.005	< 0.005	—	3.44
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.88	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.60	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.94	1.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134

Architect Coatings	1.94	1.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.2	46.2	< 0.005	< 0.005	—	46.4
Architectural Coatings	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.66	7.66	< 0.005	< 0.005	—	7.68
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.55	5.55	< 0.005	< 0.005	0.02	5.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.99	4.99	< 0.005	< 0.005	< 0.005	5.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.94	1.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.94	1.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.21	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.2	34.2	< 0.005	< 0.005	—	34.3
Architectural Coatings	0.50	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.67	5.67	< 0.005	< 0.005	—	5.69
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.46	5.46	< 0.005	< 0.005	0.02	5.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.91	4.91	< 0.005	< 0.005	< 0.005	4.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.29	1.29	< 0.005	< 0.005	< 0.005	1.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.44	0.41	0.38	3.08	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	669	669	0.03	0.03	2.22	681
Total	0.44	0.41	0.38	3.08	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	669	669	0.03	0.03	2.22	681
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.40	0.37	0.44	2.77	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	623	623	0.03	0.03	0.06	633
Total	0.40	0.37	0.44	2.77	0.01	0.01	0.54	0.55	0.01	0.14	0.15	—	623	623	0.03	0.03	0.06	633
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.07	0.07	0.08	0.49	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	102	102	< 0.005	0.01	0.15	104
Total	0.07	0.07	0.08	0.49	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.03	—	102	102	< 0.005	0.01	0.15	104

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	33.4	33.4	0.01	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	33.4	33.4	0.01	< 0.005	—	33.7

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	33.4	33.4	0.01	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	33.4	33.4	0.01	< 0.005	—	33.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	5.52	5.52	< 0.005	< 0.005	—	5.58
Total	—	—	—	—	—	—	—	—	—	—	—	—	5.52	5.52	< 0.005	< 0.005	—	5.58

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.3	65.3	0.01	< 0.005	—	65.4
Total	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.3	65.3	0.01	< 0.005	—	65.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.3	65.3	0.01	< 0.005	—	65.4
Total	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	65.3	65.3	0.01	< 0.005	—	65.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.8

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	147	147	< 0.005	< 0.005	—	148
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.03	< 0.005	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.06	1.06	< 0.005	< 0.005	—	1.07
Total	0.46	0.45	0.12	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	148	148	< 0.005	< 0.005	—	149
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	147	147	< 0.005	< 0.005	—	148
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.42	0.42	0.12	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	147	147	< 0.005	< 0.005	—	148
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.48	5.48	< 0.005	< 0.005	—	5.49
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.09	0.09	< 0.005	< 0.005	—	0.09
Total	0.08	0.08	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.57	5.57	< 0.005	< 0.005	—	5.57

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Total	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Total	—	—	—	—	—	—	—	—	—	—	—	0.43	1.36	1.79	0.04	< 0.005	—	3.21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.07	0.23	0.30	0.01	< 0.005	—	0.53
Total	—	—	—	—	—	—	—	—	—	—	—	0.07	0.23	0.30	0.01	< 0.005	—	0.53

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Total	—	—	—	—	—	—	—	—	—	—	—	2.13	0.00	2.13	0.21	0.00	—	7.45
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23

Total	—	—	—	—	—	—	—	—	—	—	—	0.35	0.00	0.35	0.04	0.00	—	1.23

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2026	6/2/2026	5.00	2.00	—
Grading	Grading	6/3/2026	6/16/2026	5.00	10.0	—
Building Constructoin	Building Construction	6/24/2026	4/27/2027	5.00	220	—

Paving	Paving	6/17/2026	6/23/2026	5.00	5.00	—
Architectural Coating	Architectural Coating	7/8/2026	5/11/2027	5.00	220	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Constructoin	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Constructoin	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Constructoin	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Constructoin	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Constructoin	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Building Constructoin	—	—	—	—
Building Constructoin	Worker	2.52	14.3	LDA,LDT1,LDT2
Building Constructoin	Vendor	0.75	8.80	HHDT,MHDT
Building Constructoin	Hauling	0.00	20.0	HHDT
Building Constructoin	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.50	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	27,641	9,214	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	3.00	0.00	—
Grading	—	—	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.08

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.08	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	66.1	66.8	59.9	23,831	753	761	682	271,414

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	7
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
27641.25	9,214	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	59,680	204	0.0330	0.0040	203,630

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	223,895	1,075,430

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	3.95	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Lot acreage conservatively adjusted to represent overall disturbance area of the project site.
Construction: Construction Phases	Based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days. Phase timing is based on the project-specific construction schedule provided by the applicant.
Operations: Hearths	The changes are based on project-specific information provided by the applicant.
Construction: On-Road Fugitive Dust	All roads in project vicinity are paved.
Operations: Road Dust	All roads in the project vicinity are paved.

APPENDIX B

BIOLOGICAL ASSESSMENT

MOORE BIOLOGICAL CONSULTANTS

RECEIVED
JAN 05 2023
EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

September 1, 2022

Mr. Elliot Pope
Alder Mountain Millworks, Inc.
4617 Weed Patch Court
Greenwood, CA 95635

Subject: 294+/- ACRE "VICTORIA WAY" SITE, EL DORADO COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Elliot:

Thank you for asking Moore Biological Consultants to assist with this approximately 294+/- acre site in western El Dorado County, California (Figures 1 and 2 and Tentative Map in Attachment A). The purpose of this assessment is to describe existing biological resources in the site, identify potentially significant impacts to biological resources from large-lot residential development, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases and aerial photographs, and conducting field surveys to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Methods

Prior to the field surveys, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2022). The CNDDB search included the USGS 7.5-minute Folsom SE and Latrobe topographic quadrangles, which encompass approximately 120 square miles surrounding the project site. The United States Fish and Wildlife Service

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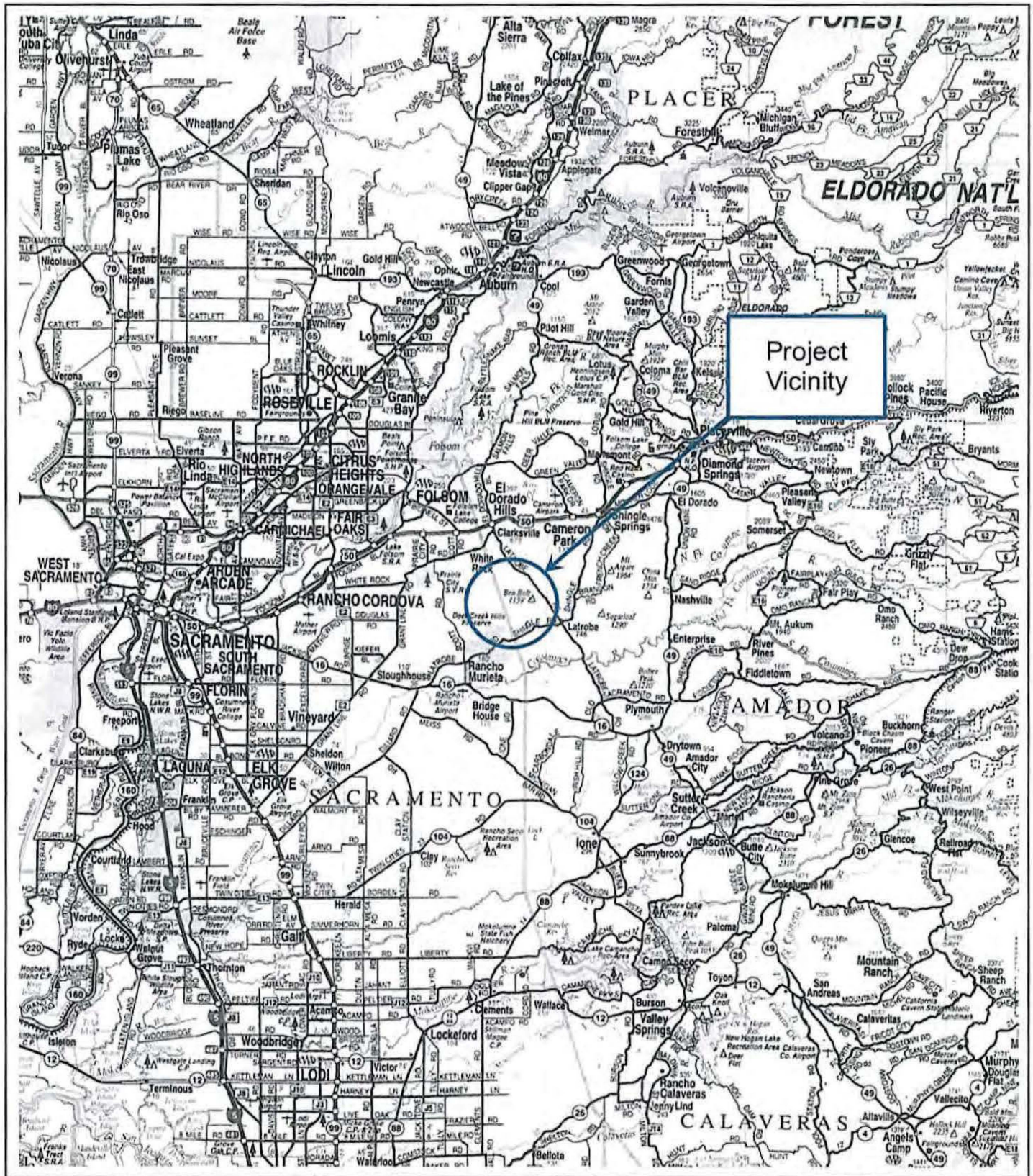
(209) 745–1159 • Fax (209) 745-7513
e-mail: moorebio@softcom.net

TM22-0004



Source: California State Automobile Association

Moore Biological Consultants

N
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FIGURE 1

PROJECT VICINITY

*Figure not OCR compatible.

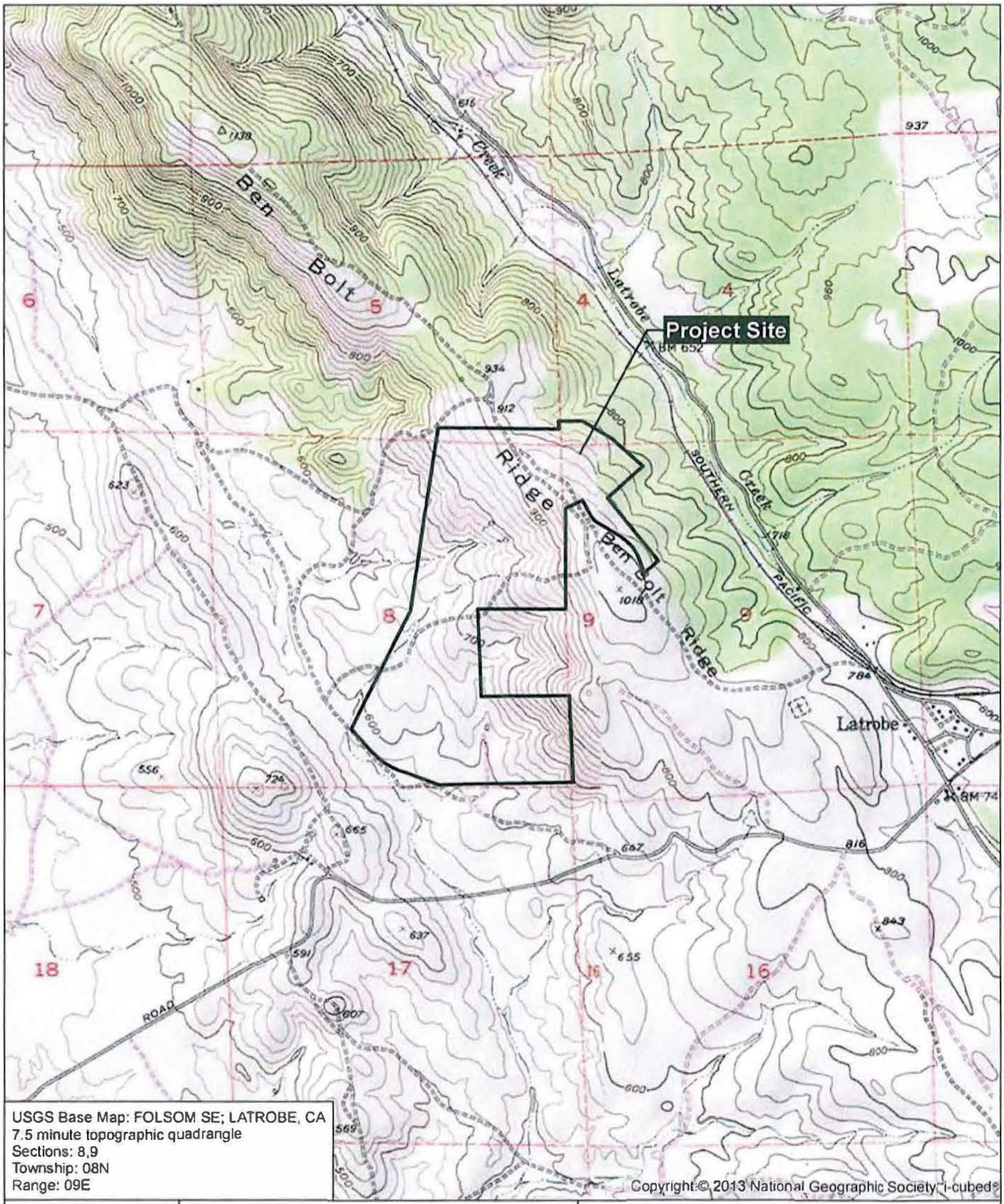

Figure 2

Moore Biological Consultants

USGS

Victoria Way

El Dorado County, CA

Map Date: 07/19/2020

*Figure not OCR compatible.

(USFWS) IPaC Trust Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify wildlife and plant species that have been previously documented in the project vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts locations of sensitive habitats. The USFWS on-line maps of designated critical habitat were also downloaded.

Diane S. Moore, M.S., and Colleen Laskowski, M.S. conducted field surveys on April 20, May 10, May 18, and June 2, 2022. The surveys consisted of walking and driving throughout the site making observations of habitat conditions and noting surrounding land uses, vegetation types, and plant and wildlife species.

Habitats in the site, such as oak woodland and annual grassland, were identified in the field and mapped on high-resolution aerial photographs. The habitat boundaries were then combined with a 2021 Google Earth color aerial photograph in ArcGIS to quantify acreages and create a map of habitat types.

A preliminary delineation of potentially jurisdictional Waters of the U.S. and wetlands was also undertaken. Potentially jurisdictional areas were delineated in accordance with the U.S. Army Corps of Engineers (ACOE) Wetland Delineation Manual (ACOE, 1987) and Arid West Region Regional Supplement (ACOE, 2008). The boundaries of potentially jurisdictional Waters of the U.S. and wetlands were mapped using a Trimble GeoXT Global Positioning System (GPS) unit. The GPS data was corrected using the nearest available base station and combined with a 2021 Google Earth color aerial photograph in ArcGIS to create an aquatic resources delineation map.

The surveys included a search for special-status species and potentially suitable habitat for special-status species (e.g., areas with unusual soils, vernal pools, caves). Additionally, trees in and near the site were assessed for the potential

use by nesting raptors and the site was also searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows that could be utilized by burrowing owls.

Under contract to Moore Biological, Salix Consulting, Inc. conducted a Botanical Assessment for special-status plants in the project site. Botanist Jeff Glazner conducted the botanical surveys on April 20, May 10, and July 8, 2022.

Results

GENERAL SETTING: The 294+/- acre site is near the historic town of Latrobe in western El Dorado County, California (Figure 1). The site is in Sections 4, 5, 8 and 9 in Township 8 North, Range 9 East of the USGS 7.5-minute Latrobe and Folsom SE topographic quadrangles (Figure 2). The site consists of rolling hills, sloping generally to the southwest, and ranging in elevations from approximately 600 to 900 feet above mean sea level.

The site primarily consists of open hillsides supporting annual grassland vegetation and a few aquatic features including several intermittent creeks, a few side-hill seeps, and a stock pond (Figure 3 and photographs in Attachment C). Cattle grazing, development, construction and use of farm roads and fire breaks, and off-road vehicles have somewhat modified vegetation and topography within the project vicinity, including that within the site.

Surrounding land uses in this portion of El Dorado County are primarily agriculture and open space, interspersed with large homes on expansive parcels. Settlers Trail is situated along a portion of the south edge of the site and part of the west edge of the site. The remaining edges of the site are adjacent to open grassland fields, similar to those in the site, and areas of oak woodland. There are several homes on relatively large parcels further west and south of the site.

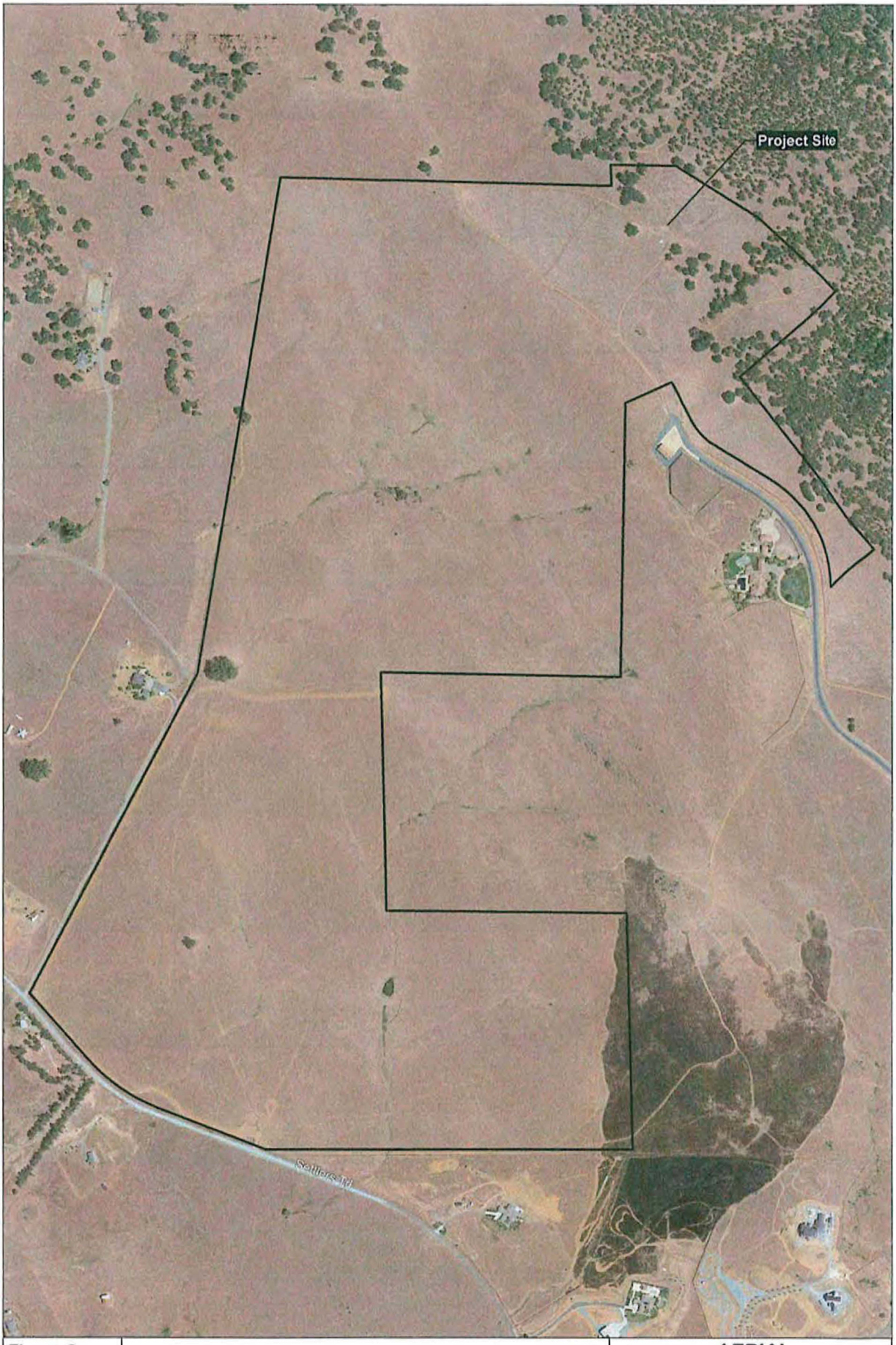

Figure 3

Moore Biological Consultants

0 150 300
Feet

Map Date: 08/03/2022
Aerial Source: Google Earth (06/2021)

AERIAL

Victoria Way

El Dorado County, CA

VEGETATION AND HABITAT TYPES: The site is comprised of a mosaic of grassland areas, oak woodlands, and aquatic habitats (Figure 4 and photographs in Attachment C). Vegetation communities in the project site include annual grassland and oak woodland, which generally correspond to the California Annual Grassland series and the Blue Oak series (Sawyer and Keeler-Wolf, 1995). There are also several intermittent creeks, ephemeral creeks, seeps, and a stock pond in the site.

Annual Grassland: Historically, the California Annual Grassland series was the most widespread upland vegetation type occurring in the greater project vicinity and was comprised of native grass and weed species. In contrast, the grasslands in the site are subject to intensive cattle grazing, moderately to highly disturbed, and comprised of primarily non-native species. The project site contains 283+/- acres of annual grassland vegetation (Figure 4 and photographs in Appendix C).

Oats (*Avena fatua*), foxtail barley (*Hordeum murinum*), soft chess brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and perennial ryegrass (*Lolium perenne*) are the dominant grasses in the site. Other grassland species such as rose clover (*Trifolium hirtum*), black mustard (*Brassica nigra*), elegant cluster lily (*Brodiaea elegans*), Italian thistle (*Carduus pycnocephalus*), and long-beaked stork's-bill (*Erodium botrys*) are intermixed with the grasses. There are also a few trees and shrubs in the grasslands including coffeeberry (*Frangula californica*), blue gum (*Eucalyptus sp.*), blue elderberry (*Sambucus nigra ssp. cerulea*), and patches of poison oak (*Toxicodendron diversilobum*). Table 1 is a list of representative plant species in the site. A complete list of all plant species documented in the site during the rare plant surveys is included in Attachment D.

Blue Oak Woodlands: The Blue Oak series (Sawyer and Keeler-Wolf, 1995) best describes the oak woodland habitats in the site. The project site contains 8.5+/- acres of blue oak woodland vegetation (Figure 4 and photographs in Attachment C). This series is found at relatively low elevations in the Sierra

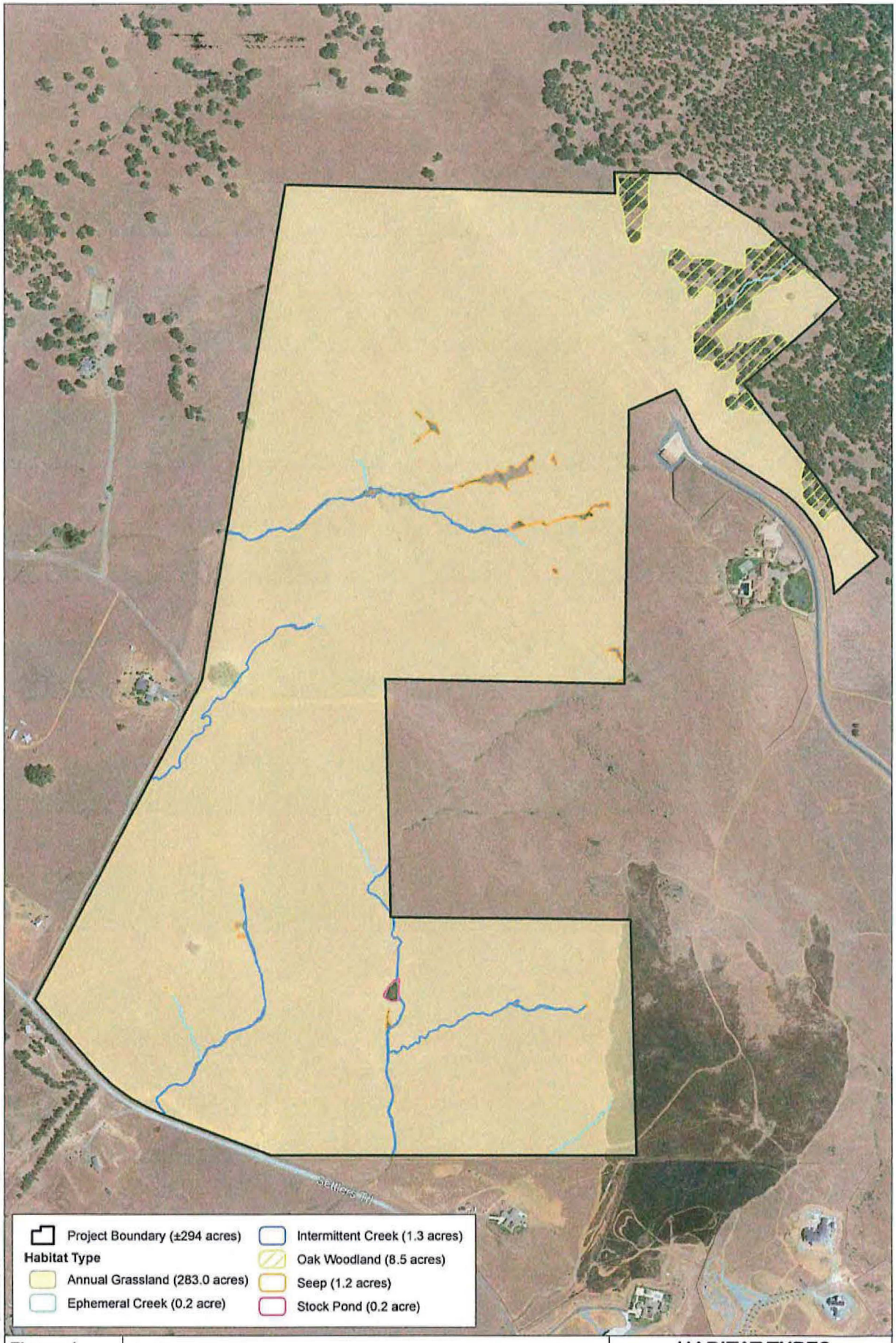

Figure 4

Moore Biological Consultants

Map Date: 08/03/2022
Aerial Source: Google Earth (06/2021)

HABITAT TYPES

Victoria Way

El Dorado County, CA

TABLE 1

REPRESENTATIVE PLANT SPECIES IN THE SITE

Acmispon americanus	Spanish clover
Aira caryophyllea	silver hairgrass
Alisma triviale	northern water plaintain
Avena sp.	oat
Brassica nigra	black mustard
Brodiaea elegans	elegant cluster lily
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess brome
Calochortus luteus	yellow mariposa lily
Carduus pycnocephalus	Italian thistle
Cyperus eragrostis	tall flat sedge
Delphinium nuttallianum	Nuttall's larkspur
Deschampsia danthonioides	annual hair grass
Eleocharis palustris	common spikerush
Erodium botrys	long-beaked stork's-bill
Erodium cicutarium	red stem filaree
Hordeum marinum	Mediterranean barley
Hordeum murinum	foxtail barley
Juncus balticus	Baltic rush
Juncus bufonius	toad rush
Juncus effusus	lamp rush
Leontodon saxatilis	long-beaked hawkbit
Lolium perenne	perennial ryegrass
Lythrum hyssopifolium	Hyssop loosestrife
Mimulus guttatus	seep monkey-flower
Paspalum dilatatum	golden crown grass
Plagiobothrys nothofulvus	rusty popcorn flower
Polypogon monspeliensis	annual rabbit's foot grass
Rumex crispus	curly dock
Sambucus nigra ssp. cerulea	blue elderberry
Taeniatherum caput-medusae	medusa-head grass
Trifolium hirtum	rose clover
Triteleia hyacinthina	white brodiaea
Typha latifolia	broadleaf cattail
Zeltnera muehlenbergii	Muhlenberg's centaury

Nevada, coastal range, and other locations in the state. Blue oaks (*Quercus douglasii*) are the dominant tree species in the on-site woodlands; there are also a few valley oaks (*Quercus lobata*) and interior live oaks (*Quercus wislizeni*) in the woodlands.

Riverine: Riverine habitats in the site include intermittent creeks and ephemeral creeks. The project site contains 1.5+/- acres of riverine habitats (Figure 4 and photographs in Appendix C). Representative vegetation within the bed of the intermittent creeks in the site include species such as seaside barley (*Hordeum marinum*), Hyssop loosestrife (*Lythrum hyssopifolium*), annual rabbit's-foot grass (*Polypogon monspeliensis*), and toad rush (*Juncus bufonius*).

Seep: Side-hill seeps at the headwater of the creeks contain the same species within the creek beds, but also includes other common hydrophytes such as curly dock (*Rumex crispus*), (*Juncus effusus*), and tall flat sedge (*Cyperus eragrostis*) (see photographs in Attachment C).

Stock Pond: There is a 0.2+/- acre stock pond in the south part of the site (Figure 4 and photographs in Appendix C). The stock pond contains a notable, but relatively small patch of cattails (*Typha latifolia*) and supports other hydrophytic species including common spikerush (*Eleocharis palustris*), and northern water plantain (*Alisma triviale*).

WILDLIFE: several birds were observed in the site during the field surveys. Great egret (*Casmerodius albus*), mallard (*Anas platyrhynchos*), turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), California scrub jay (*Aphelocoma californica*), acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), Brewer's blackbird (*Euphagus cyanocephalus*), and western meadowlark (*Sturnella neglecta*) are representative avian species observed in the site. A complete list of birds and other wildlife observed in the site is on Table 2.

TABLE 2

WILDLIFE SPECIES DOCUMENTED IN THE SITE

Birds	
Turkey vulture	*Cathartes aura*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
California quail	*Callipepla californica*
Killdeer	*Charadrius vociferous*
Mourning dove	*Zenaida macroura*
Acorn woodpecker	*Melanerpes formicivorus*
Northern flicker	*Colaptes auratus*
Say's phoebe	*Sayornis saya*
Western kingbird	*Tyrannus verticalis*
American crow	*Corvus brachyrhynchos*
Bushtit	*Psaltriparus minimus*
Western bluebird	*Sialia mexicana*
Loggerhead shrike	*Lanius ludovicianus*
Yellow-rumped warbler	*Setophaga coronata*
Red-winged blackbird	*Agelaius phoeniceus*
Western meadowlark	*Sturnella neglecta*
Brewer's blackbird	*Euphagus cyanocephalus*
House finch	*Carpodacus mexicanus*
Mammals	
Botta's pocket gopher	*Thomomys bottae*
Black-tailed hare	*Lepus californicus*
Black-tailed (mule) deer	*Odocoileus hemionus columbianus*
Reptiles and Amphibians	
Western terrestrial garter snake	*Thamnophis elegans*
American bullfrog	*Lithobates catesbeianus*
Pacific chorus frog	*Pseudacris regilla*
Western fence lizard	*Sceloporus occidentalis*

There are a several large trees in the site and several large trees near the site that are suitable for nesting raptors. Given the presence of large trees in and near the site and raptor foraging habitat (i.e., open fields) in and near the site, it is possible raptors nest in and near the site during most years. A red-tailed hawk was documented nesting in a cluster of eucalyptus trees near the west edge of the site. A large stick nest was observed in one of these trees and red-tailed hawks were observed displaying territorial behavior during a few of the field surveys. Smaller birds, such as songbirds, could potentially nest in shrubs, grasslands, and small trees along the aquatic features in the site, including the intermittent creeks and the small stock pond. Several nesting red-winged blackbirds were documented nesting in the patch of cattails in the stock pond.

A few common mammals have potential to occur in the site. A black-tailed deer (*Odocoileus hemionus columbianus*) and a few black-tailed hares (*Lepus californicus*) were the only mammals observed in the site during the field surveys; several Botta's pocket gopher (*Thomomys bottae*) burrows were also observed scattered throughout the grasslands. Other species such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), and Virginia opossum (*Didelphis virginiana*) may occur in the project site on occasion. A number of species of small rodents including mice (*Mus musculus, Reithrodontomys megalotis,* and *Peromyscus maniculatus*) and voles (*Microtus californicus*) also likely occur in the site.

Based on habitat types present, a limited variety of amphibians and reptiles may use habitats in the site. Pacific chorus frog (*Pseudacris regilla*) and American bullfrog (*Lithobates catesbeianus*) were observed in the stock pond in the site. Western fence lizard (*Sceloporus occidentalis*) and western terrestrial garter snake (*Thamnophis elegans*) were observed in the grasslands in the site. The site is within the range of common king snake (*Lampropeltis getulus*) and western rattlesnake (*Crotalis viridis*); these and other common amphibian and reptile species may also occur on-site.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Some jurisdictional waters of the U.S. also fall under the jurisdiction of CDFW and/or the California Regional Water Quality Control Board (RWQCB).

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their intermittent tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but may be regulated by RWQCB under the State Wetlands Program.

Jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and Waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

A total of 2.88 acres of potential Waters of the U.S., including wetlands was delineated in the 294+/- acre site (Moore Biological Consultants, 2022). This total includes 6 intermittent creeks, 8 ephemeral creeks, 12 seeps, and a stock pond. The remainder of the site is vegetated in ruderal upland grassland vegetation, with soils that appear well draining. Under regulations in place as of September 2022, most of the mapped aquatic resources are believed to fall under the jurisdiction of the ACOE.

Intermittent Creeks: There are six intermittent creeks in the site that encompass a total of 1.32 acres and are labeled "IC-1 through IC-6" on the Wetland Delineation Map (Attachment E). The intermittent creeks appear to primarily convey water during and following rain events. However, several of the intermittent creeks are also supported by underground seeps that trickle at least minor quantities of water in to portions of the creeks on a nearly year-round basis during most years.

The intermittent creeks in the site vary in size, but all contain well-defined beds and banks with bedrock and rocky substrates along portions of many of the channels (see photographs in Attachment C). There are cobbles and gravels in some areas. Sections of some of the intermittent creeks are relatively low gradient and resemble seasonal wetland swales, with boggy soils and seasonal wetland vegetation.

Ephemeral Creeks: There are eight ephemeral creeks in the site that encompass 0.20 acres and area labeled "EC-1 through EC-8" on the Wetland Delineation Map (Attachment E). Most of these creeks are relatively short and flow into the intermittent creeks, with the exception of Ephemeral Creeks EC-1 and EC-8, which flow directly off the site. Ephemeral Creek EC-1 is located in the oak woodlands in the northeast part of the site and drains to the northeast and Ephemeral Creek EC-8 is located in the southeast part of the site and drains to

the south. The remaining ephemeral creeks are associated with the intermittent creeks in the central and south parts of the site.

The ephemeral creeks carry water only during and very shortly after rain events, and are dry the remainder of the time. The ephemeral creeks lack seep and spring input and are comparatively less saturated than the intermittent creeks. The ephemeral creeks also have relatively small watersheds. The ephemeral creeks have well-defined beds and banks, with bedrock and rocky substrates along portions of many of the channels, and cobbles and gravels in some areas. The beds of some sections of the ephemeral creeks are vegetated with hydrophytic species as well as some upland grasses and weeds.

Seeps: There are a total of twelve seeps in the site that encompass 1.20 acres and are labeled "Seep-1" through "Seep-12" on the Wetland Delineation Map (Attachment E). Many of the seeps are situated upstream or adjacent to one of the intermittent creeks in the site and drain in to the creek. The remaining seeps are spatially and hydrologically isolated from the creeks and are entirely surrounded by uplands.

The larger and most developed seeps in the site appear to trickle water much of the year, with some actively flowing during the field surveys. The seeps in the site are vegetated with much of the same hydrophytes found throughout the aquatic features in the site

Stock Pond: There is a 0.17-acre stock pond in the south part of the site is that is labeled "Stock Pond SP-1" on the Wetland Delineation Map (Attachment E). This pond appears to have been a natural seep that was excavated and made larger, likely to support cattle watering in the site. There is a man-made dam on the south edge of the pond and elevated berms surrounding the pond. Intermittent Creek IC-5 flows in to the stock pond and the water leaves the pond either via a constructed outlet channel, or by seeping under the dam.

Several red-winged blackbirds were observed nesting in vegetation in the pond during the field surveys and it appears very productive biologically, supporting American bullfrog and Pacific chorus frog. The pond contained water during all of the field surveys and likely holds at least some water year-round.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitats. The presence of species with legal protection under the Endangered Species Act often represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2022). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Three species of special-status plants were identified in the CNDDB (2022) search: Brandegee's clarkia (Clarkia biloba ssp. brandegeeae), Tuolumne button celery (Eryngium pinnatisectum), and Sanford's arrowhead (Sagittaria sanfordii) (Table 3 and Attachment B). No special-status species are identified in the USFWS IPaC Trust Report (Attachment B).

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, and areas with unusual soils. The grasslands in the site have been highly disturbed by grazing, off-road vehicles, and construction of roads in the site and on adjacent parcels.

No special-status plants were found during protocol-level surveys conducted in Spring and Summer 2022 (Attachment D). Most importantly, the site does not provide suitable habitat for a notable complex of eight special-status plant species that occur over a broad area to the north of the study area on gabbro soils. These plants include El Dorado bedstraw (*Galium californicum ssp. sierrae*), Pine Hill ceanothus (*Ceanothus roderickii*), Pine Hill flannelbush (*Fremontodendron decumbens*), Stebbins' morning-glory (Calystegia stebbinsii), Layne's butterweed (*Packera layneae*), Red Hill soaproot (*Chlorogalum grandiflorum*), El Dorado mule-ears (*Wyethia reticulata*), and Bisbee Peak rush-rose (*Helianthemum suffrutescens*). This complex of gabro associated plants

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
PLANTS						
Brandegee's clarkia	*Clarkia biloba ssp. brandegeeae*	None	None	4	Chaparral, cismontane woodland, and lower montane coniferous forest; often on road cuts; at elevations between 245 and 3,000 feet.	Unlikely: the oak woodlands provide potentially suitable habitat for this species. However, Brandegee's clarkia was not found during protocol-level special-status plant surveys (Salix Consulting, Inc., 2022). The nearest occurrence of this species in the CNDDB (2022) search area is approximately 4 miles northeast of the site.
Tuolumne button celery	*Eryngium pinnatisectum*	None	None	1B	Vernal pools and other mesic habitats within cismontane woodland and lower montane coniferous forest; at elevations between 230 and 3,000 feet.	Unlikely: some of the creeks and seeps in the site provide potentially suitable habitat for Tuolumne button celery. However, this species was not observed in the site during protocol-level special-status plant surveys (Salix Consulting, Inc., 2022). The nearest occurrence of this species in the CNDDB (2022) search area is approximately 5 miles southwest of the site.
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow-moving freshwater ponds, marshes, and ditches; at elevations between 0 and 2,135 feet.	Unlikely: the stock pond provides potentially suitable habitat for Sanford's arrowhead. However, this species was not observed in the stock pond or elsewhere in the site during protocol-level special-status plant surveys (Salix Consulting, Inc., 2022). The nearest occurrence of Sanford's arrowhead in the CNDDB (2022) search area is approximately 4.5 miles northwest of the site.
WILDLIFE						
BIRDS						
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nesting: large trees, usually within riparian corridors. Foraging: agricultural fields and annual grasslands.	Unlikely: While there are large trees in and in close proximity to the site are suitable for nesting, the annual grasslands provide poor quality foraging habitat for Swainson's hawks. Further, the site is just east of east edge of the nesting range of this species. There are only two records of nesting Swainson's hawks in the CNDDB (2022) search area; the nearest occurrence is approximately 5.5 miles southwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
Burrowing owl	*Athene cunicularia*	None	None	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: the annual grassland provides little, if any, burrow habitat for burrowing owls; no ground squirrels or their burrows were observed in the site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 3 miles southwest of the site.
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Nests in dense brambles and emergent wetland vegetation associated with open water habitat.	Low: the stock pond provides suitable nesting habitat for this species. However, only red-winged blackbirds were observed nesting in vegetation within the stock pond. Tricolored blackbirds are also more commonly associated with larger open water habitats and larger stands of cattails, emergent wetland vegetation. The nearest occurrence of tricolored blackbird in the CNDDB (2022) search area is approximately 4 miles northwest of the site.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Found in a variety of habitats; prefers open country for hunting with perches for scanning, and fairly dense shrubs and brush for nesting.	Present: although there are no occurrences of this species in the CNDDB (2022) search area, a pair of loggerhead shrikes was observed perching and foraging in the site. There are trees and shrubs in the site suitable for nesting loggerhead shrike and the grasslands are suitable for foraging.
Grasshopper sparrow	*Ammodramus savannum*	None	SC	N/A	Dense grasslands, lowland plains, and lower mountain slopes; prefers native grasses with scattered shrubs.	Unlikely: the site provides poor quality habitat for grasshopper sparrow. This species may occasionally fly over or forage in the area. The nearest occurrence of grasshopper sparrow in the CNDDB (2022) search area is approximately 5 miles southwest of the site.
REPTILES & AMPHIBIANS						
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: the site does not provide suitable habitat for California red-legged frog; the creeks are too small and are dry much of the year and there are predatory bullfrogs in the stock pond. There are no occurrences of California red-legged frog recorded in the CNDDB (2022) search area. The site is not within designated critical habitat for California red-legged frog (USFWS, 2006).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Breeds in seasonal water bodies such as deep vernal pools or stock ponds. Requires small mammal burrows for summer refugia.	Unlikely: the stock pond provides marginal, yet potentially suitable breeding habitat for California tiger salamander. However, there are predatory bullfrogs in the stock pond. The site is well outside the known range of the species and there are no occurrences of California tiger salamander recorded in the CNDDB (2022) search area. The site is not within an area designated critical habitat for this species (USFWS, 2005a).
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; uses drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: the site does not provide suitable habitat for giant garter snake. The nearest occurrence of this species in the CNDDB (2022) search area is a 1983 observation of a two-headed snake whose precise location is not known; it is mapped in the CNDDB approximately 5 miles southwest of the site.
Western pond turtle	*Emys marmorata*	None	SC	N/A	Permanent or semi-permanent water bodies; require basking sites such as logs.	Unlikely: the one stock pond provides poor quality suitable habitat for western pond turtle, primarily due to its small size. It is also unlikely that this species would travel across expansive grasslands and roads from a different water source to the pond. The nearest occurrence of western pond turtle in the CNDDB (2022) search area is approximately 2.5 miles northwest of the site.
Fish						
Delta smelt	*Hypomesus transpacificus*	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no suitable aquatic habitat for delta smelt in the site. Delta smelt occurs in delta waterways and there are no occurrences of this species recorded in the CNDDB (2022) search area. The site is not in designated critical habitat for delta smelt (USFWS, 1994).
Central Valley steelhead	*Oncorhynchus mykiss*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: the site does not provide suitable habitat for this species. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 5 miles southwest of the site. The site is not in designated critical habitat for Central Valley steelhead (NOAA, 2005).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED IN THE GREATER PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[1]	CNPS List[2]	Habitat	Likeliness of Occurrence in the Project Site
INVERTEBRATES						
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools and seasonally inundated depressions in the Central Valley.	Unlikely: there are no vernal pools in the project site. The nearest occurrence of this species in the CNDDB (2022) search area is approximately 6 miles southwest of the site. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005b).
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the project site. There are no occurrences of vernal pool tadpole shrimp recorded in the CNDDB (2022) search area. The site is not within designated critical habitat for vernal pool tadpole shrimp (USFWS, 2005b).
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills at elevations below 500 feet.	Unlikely: there is a small blue elderberry shrub in the project site. However, the shrub showed no evidence of valley elderberry longhorn beetle occupancy and the site is above the known elevation range of this species. There are no occurrences of valley elderberry longhorn beetle recorded in the CNDDB (2022) search area.
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Variety of habitats in California; larvae dependent on milkweed. Primarily associated with coastal environments.	Unlikely: monarch butterfly may fly over the site during its migration, but would not be expected to occur in the site due to a lack of suitable habitat; no milkweed plants were observed. There are no occurrences of this species in the CNDDB (2022) search area.

Notes:

1 T = Threatened; E = Endangered; C = Candidate for Listing; SC=State of California Species of Special Concern.

2 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 4 is a watch list.

have very specific growing needs and do not occur on common soils such as those that occur in the site. Gabbro soils have unusual properties derived from the underlying gabbro rock; they are generally red, mildly acidic, rich in iron and magnesium, and often contain other heavy metals such as chromium. Gabbro soils cover approximately 30,000 acres in western El Dorado County but do not occur in the site.

The summary conclusion of the Rare Plant Survey report is "the site does not contain particular habitats or soil types that would typically support rare plant species". Due to a lack of even moderately suitable habitat for special-status plants, and lack of observations during focused surveys, it is unlikely special-status plants occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of the site by special-status wildlife species is also low. Eight special-status wildlife species were recorded in project area in the CNDDB (2022) query: Swainson's hawk (*Buteo swainsonii*), burrowing owl, tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannum*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), Central Valley steelhead (*Oncorhynchus mykiss*), and vernal pool fairy shrimp (*Branchinecta lynchi*). California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), delta smelt (*Hypomesus transpacificus*), vernal pool tadpole shrimp (*Lepidurus packardi*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and monarch butterfly (*Danaus plexippus*) are not recorded in the CNDDB within the search area, but are on the USFWS IPaC Trust Report (Attachment B). Loggerhead shrike (*Lanius ludovicianus*) was added to Table 3 because it was observed in the site.

While the project site may have provided habitat for special-status wildlife species at some time in the past, agriculture, mining, grazing, and development have substantially modified natural habitats in the greater project vicinity,

including those within the site. Of the species in Table 3, Swainson's hawk, burrowing owl, tricolored blackbird, loggerhead shrike, and western pond turtle are the only species with potential to occur in the project site on more than a transitory or very occasional basis and are discussed further below.

Swainson's Hawk: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawks are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

The site is just east of east edge of the nesting range of Swainson's hawks and the CNDDB (2022) contains only two records in the greater project vicinity (Attachment B). The nearest occurrence of Swainson's hawk in the CNDDB (2022) search area is approximately 5.5 miles southwest of the site.

The open, annual grasslands in the site provide poor quality, yet potentially suitable Swainson's hawk foraging habitat. The few large trees in the site and relatively large trees near the site could be used by nesting Swainson's hawks. The large raptor stick nest observed in the eucalyptus cluster along the west edge of the site was being used by nesting red-tailed hawks and no Swainson's

hawks were observed during the field surveys. Due to the location of the site along the extreme east edge of the nesting range of this species, it is unlikely this species nests in or near the site, or forages in the site intensively, if at all.

Burrowing Owl: The Migratory Bird Treaty Act (MBTA) and Fish and Game Code of California (FGCC) protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere.

The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. In urban areas, burrowing owls often utilize artificial burrows including pipes, culverts, and piles of concrete pieces. This semi-colonial owl breeds from March through August, and is most active while hunting during dawn and dusk. The nearest record of burrowing owls in the CNDDB (2022) is approximately 3 miles southwest of the site.

The absence of burrow habitat in the site reduces the likelihood of burrowing owls using the site for nesting and no burrowing owls were observed in the project site during the field surveys. In its current condition, the site provides very limited potential nesting habitat for nesting burrowing owls. However, the site is within the species range and burrowing owls may fly over the site on an occasional basis, and may nest in the site in the future if burrow habitat is available.

Tricolored Blackbird: The tricolored blackbird is a State of California Species threatened species and is also protected by the federal MBTA and FGCC. Tricolored blackbirds are colonial nesters requiring very dense stands of

emergent wetland vegetation and/or dense thickets of wild rose or blackberries for nesting. Preferred nesting substrates are expansive stands of cattails and tules adjacent to open water. Tricolored blackbirds forage in annual grasslands and cropland. The nearest record of this species in the CNDDB (2022) search area is approximately 4 miles northwest of the site.

Tricolored blackbirds were not observed in the site, but several red-winged blackbirds were observed nesting in emergent wetland vegetation in the stock pond in the south part of the site. Tricolored blackbirds are more commonly associated with larger open water habitats and larger stands of cattails, emergent wetland vegetation, but this species could conceivably nest within the stock pond in the site. The grasslands in and adjacent to the site provide marginal foraging habitat for this species.

Loggerhead Shrike: Loggerhead shrike is a State of California Species of Concern, but is not a listed species at the state or federal level. The MBTA and FGCC protect loggerhead shrike year-round, as well as their nests during nesting season; nesting for this species peaks from January to July. Loggerhead shrike can be found variable habitats such as agricultural fields, riparian areas, and pastures. Loggerhead shrike breeds mainly in open areas with scattered shrubs and trees dominated.

There are no occurrences of loggerhead shrike within the CNDDB (2022) search area, but two loggerhead shrikes were seen foraging and perching in trees in the site during multiple survey days. These shrikes likely nested within a tree in the site or adjacent to the site during Spring 2022.

Western Pond Turtle: The western pond turtle is a state species of concern, but is not a listed species at the state or federal level. Western pond turtles are associated with permanent or nearly permanent bodies of water with adequate basking sites such as logs, rocks or open mud banks. Pond turtles construct

nests in sandy banks along slow-moving streams and ponds in the spring and the young usually hatch in 2 to 3 months. The nearest occurrence of western pond turtle in the CNDDB (2022) search area is approximately 2.5 miles northwest of the site.

The stock pond in the site is small and isolated, but provides marginally suitable habitat for western pond turtle. However, no turtles were observed during the survey and it is considered unlikely that a turtle would travel across roads and expansive grasslands from a different water source in the project vicinity to get to the pond. The stock pond is also very muddy and shallow, providing limited swimming opportunities for turtles of any species.

OTHER SPECIAL-STATUS WILDLIFE SPECIES: The site does not provide even moderately suitable habitat for other special-status wildlife species. Special-status birds and may fly over the area on occasion, but few, if any, would be expected to use on-site habitats on more than an occasional or transitory basis.

The site does not provide suitable aquatic habitat for any species of special-status fish, California red-legged frog, California tiger salamander, or giant garter snake. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp). While there is a blue elderberry shrub in the site, the shrub showed no evidence of valley elderberry longhorn beetle occupancy and the site is above the known elevation range of this species. Lastly, Monarch butterfly may fly over the site during its migration period, but would not be expected to utilize the site in a meaningful capacity; no milkweed plants were observed in the highly disturbed grassland in the site and this species is more associated with coastal environments.

CRITICAL HABITAT: The site is not in designated critical habitat of California red-legged frog (USFWS, 2006), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants, such as Sacramento Orcutt grass

(USFWS, 2005b), delta smelt (USFWS, 1994) Central Valley steelhead (NOAA, 2005), or valley elderberry longhorn beetle (USFWS, 1980) (Attachment F).

Conclusions and Recommendations

- The site primarily consists of rolling hills vegetated in upland grasses and weeds. The annual grassland habitats in the site are biologically unremarkable.

- Potentially jurisdictional Waters of the U.S. and wetlands in the site include 6 intermittent creeks, 8 ephemeral creeks, 12 seeps, and a stock pond. The remainder of the site is vegetated in ruderal upland grassland vegetation, with soils that appear well draining. Under regulations in place as of September 2022, most of the mapped aquatic resources are believed to fall under the jurisdiction of the ACOE. The jurisdictional status of the small creek is not known. To ascertain the jurisdictional status of this creek, a wetland delineation would need to be submitted to ACOE for verification.

- Avoidance of potentially jurisdictional Waters of the U.S. and wetlands is recommended, if possible, and could likely be accomplished through thoughtful planning and design. For example, constructing a clear-span bridge over a creek to provide access to a new home, would not trigger a need for permits as there would be no work in the creek.

- If complete avoidance of jurisdictional Waters of the U.S. and wetlands is infeasible, impacts should be minimized to the maximum extent practicable. Permits from ACOE, RWQCB, and CDFW may be needed prior to the placement of any fill material (e.g., culverts, fill dirt, rock) within jurisdictional Waters of the U.S. If the acreage is under 0.5 acres, it is expected ACOE would authorize any fills under a Nationwide Permit.

- Due to a lack of even moderately suitable habitat for special-status plants, and lack of observations during focused surveys, it is unlikely special-status plants occur in the site.

- Swainson's hawk, burrowing owl, tricolored blackbird, loggerhead shrike, and western pond turtles are the only species with more than a very low potential to occur in the project site on more than a transitory or very occasional basis.

- A pre-construction survey for burrowing owls within 250 feet of the footprint of any project-related construction areas (i.e., new access roads or a home site) are recommended if construction commences between February 1 and August 31. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should be pursuant to criteria set forth by CDFW (CDFG, 2012).

- A pre-construction survey for nesting Swainson's hawks within 0.25 miles of the footprint of any project-related construction areas is recommended if construction commences between March 1 and September 15. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction. The determination should utilize criteria set forth by CDFW (CDFG, 1994).

- The site is not within designated critical habitat for any federally listed species.

- Trees, shrubs, and grasslands in the site could be used by other birds protected by the Migratory Bird Treaty Act of 1918. If tree removal is scheduled during the nesting season of raptors (January 1 through July 31), a pre-construction survey for nesting raptors is recommended. If other

vegetation removal or construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests should be delayed until the young fledge.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

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USFWS (United States Fish and Wildlife Service). 1980. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17. Listing the Valley Elderberry Longhorn Beetle as a Threatened Species with Critical Habitat. Federal Register 45 No. 155, pp. 52803-52807, August 8.

USFWS. 1994. Final Critical Habitat for the Delta Smelt (*Hypomesus transpacificus*). Federal Register Vol. 59, No. 242, December 19, 1994, pp. 65256 – 65279.

USFWS. 2005a. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population; Final Rule. Federal Register Vol. 70, No. 162, August 23, 2005, pp. 49390 – 49458.

USFWS. 2005b. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon; Evaluation and Economic

Exclusions from August 2003 Final Designation, Final Rule. Federal Register Vol. 70, No. 154, August 11.

USFWS. 2006. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for California Red-Legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities, Final Rule. Federal Register Vol. 71, No. 71, April 13.

USFWS. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28pp.

Attachment A

Tentative Map

TENTATIVE PARCEL MAP

BEING A DIVISION OF PARCEL A PER PM 52-8
BEING A PORTION OF THE SW 1/4 SECTION 4, THE NE, SE AND SW 1/4 SECTION 8 AND THE NE, SW AND NW 1/4 SECTION 9, T. 8 N., R. 9 E., M. D. M.
COUNTY OF EL DORADO, STATE OF CALIFORNIA

Scale: 1" = 400'

TOMA & ASSOCIATES INC.
ENGINEERING • SURVEYING • PLANNING

November, 2021

GENERAL NOTES AND STATEMENTS

1. RECORD OWNER: DYNAMIC TRADES INC. ATTN: TYSON STEWARD, PRESIDENT 470 NEVADA STREET, SUITE 110 AUBURN, CA 95603 (530) 906-4332
   APPLICANT: ALDEN MOUNTAIN MILLWORKS, INC. ATTN: ELLIOT POPE, PROJECT MGR 4612 WEED PATCH COURT GREENWOOD, CA 95635 (559) 719-8342
2. PREPARED BY: TOMA and ASSOCIATES LICENSED LAND SURVEYORS 41 SUMMIT STREET JACKSON, CA 95642 (209) 223-4116
3. SCALE: 1" = 400'
4. CONTOUR INTERVAL: 2 FEET
5. SOURCE OF TOPOGRAPHY: TOPOGRAPHIC AERIAL SURVEY
6. ASSESSOR'S PARCEL No.: 087-010-043
7. PRESENT ZONING: RL-40
8. GENERAL PLAN: RR
9. TOTAL AREA: 519.83 ACRES
10. PROPOSED LOTS: 6 PARCELS RANGING FROM 40 ACRES TO 219.58± ACRES
11. MINIMUM LOT SIZE: MINIMUM LOT SIZE IS 40 ACRES.
12. WATER: INDIVIDUAL WELLS (1 EXISTING, 7 PROPOSED)
13. SEWAGE DISPOSAL: INDIVIDUAL SEPTIC SYSTEMS (1 EXISTING, 7 PROPOSED)
14. FIRE PROTECTION: EL DORADO HILLS FIRE DEPARTMENT
15. FLOOD ZONE: NO PORTION OF THIS PROJECT LIES WITHIN AN AREA SUBJECT TO FLOOD WATER INUNDATION BY THE 100-YEAR FLOOD AND IS WITHIN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP FOR EL DORADO COUNTY, CALIFORNIA DATED SEPTEMBER 26, 2008.
    PANEL: 0 0W AND 978 OF 1125
    MAP NUMBER: 06017C0978E AND 06017C0975E
16. FIRE HAZARD ZONE: THE MAJORITY OF THE PROJECT LIES WITHIN THE MODERATE FIRE HAZARD SEVERITY ZONE AS SHOWN ON THE FIRE FRAP MAP FOR EL DORADO COUNTY DATED NOVEMBER 7, 2007, WITH A PORTION OF THE EASTERLY BOUNDARY ALONG SOUTHERN PACIFIC RAILROAD LYING WITHIN THE HIGH FIRE HAZARD SEVERITY ZONE.

ZONING ADMINISTRATOR: _____
APPROVAL / DENIAL DATE: _____

PLANNING COMMISSION: _____
APPROVAL / DENIAL DATE: _____

BOARD OF SUPERVISORS: _____
APPROVAL / DENIAL DATE: _____

THE FOLLOWING EASEMENTS ARE NOTED IN PRELIMINARY REPORT ORDER No. _____ PREPARED BY _____ TITLE COMPANY AND DATED _____ AS AFFECTING THIS PROPERTY (SEE SAID PRELIMINARY REPORT FOR COMPLETE LIST OF EXCEPTIONS):

DOC	DESC
DOC	DESC
DOC	DESC
DOC	DESC
DOC	DESC
DOC	DESC
DOC	DESC

Scale: 1" = 400'
Contour Interval: 2'

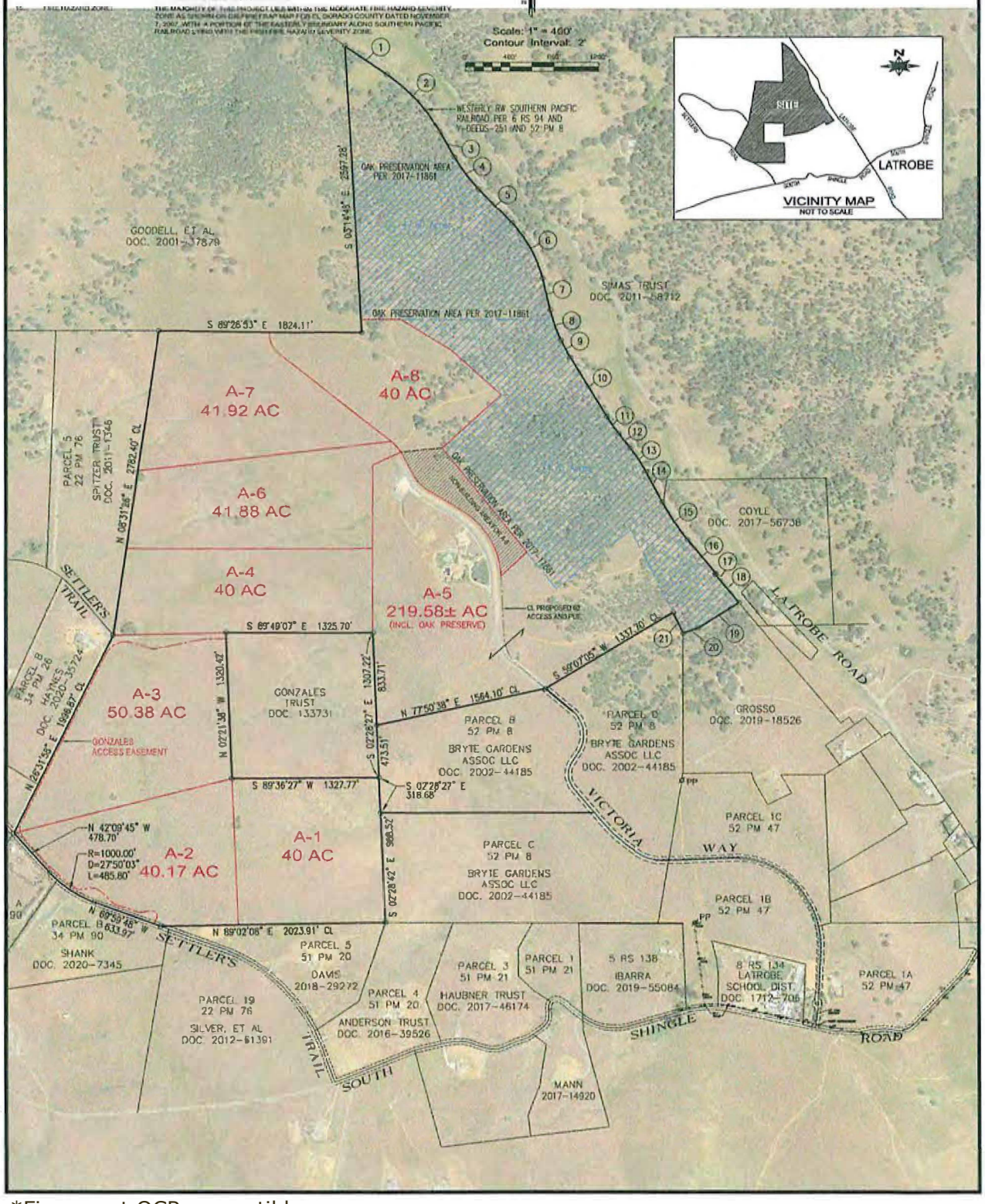


*Figure not OCR compatible.

Attachment B

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Report

Selected Elements by Scientific Name

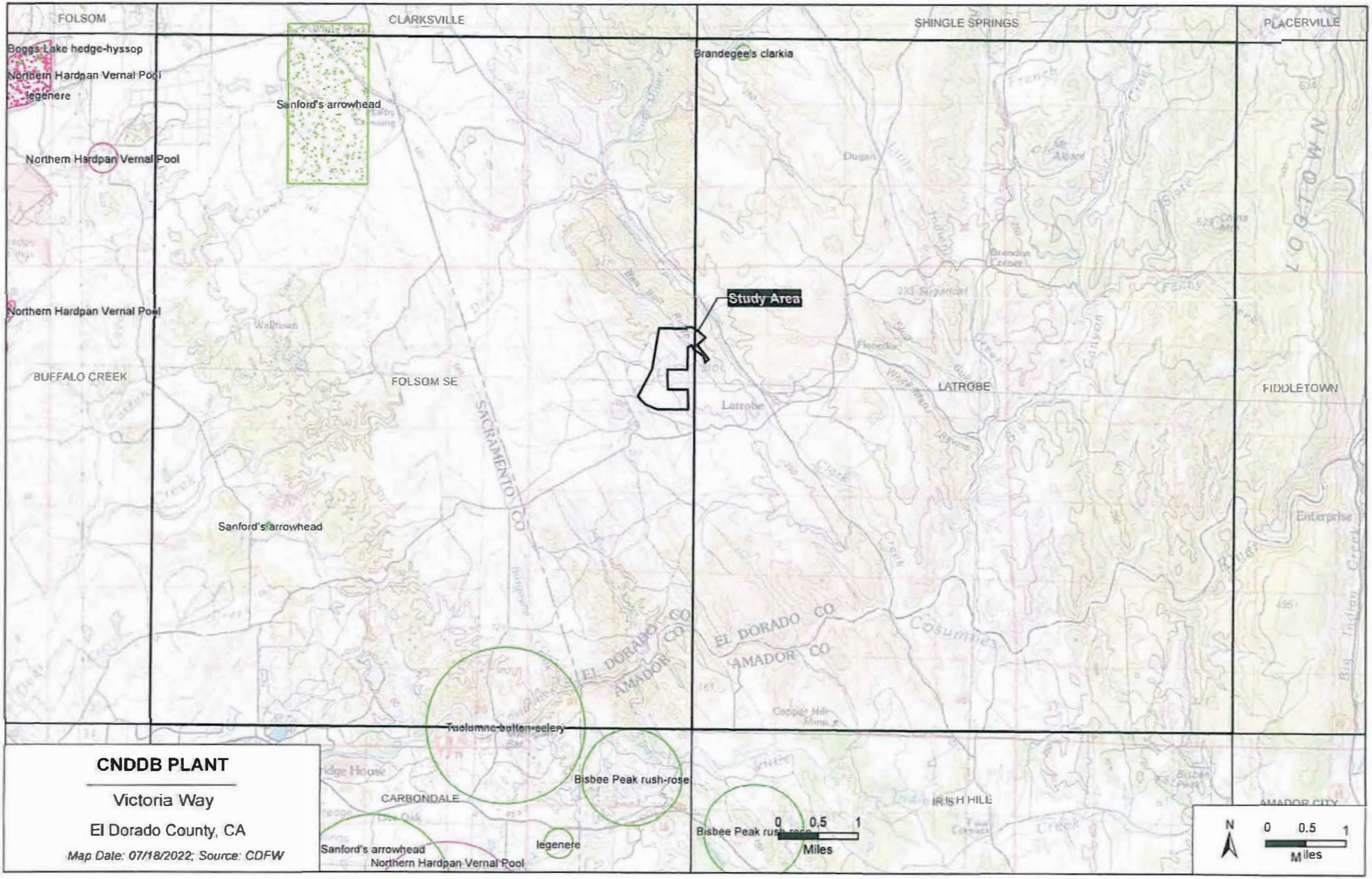
California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Latrobe (3812058) OR Folsom SE (3812151))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Clarkia biloba ssp. brandegeeae Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eryngium pinnatisectum Tuolumne button-celery	PDAPI0Z0P0	None	None	G2	S2	1B.2
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	

Record Count: 15



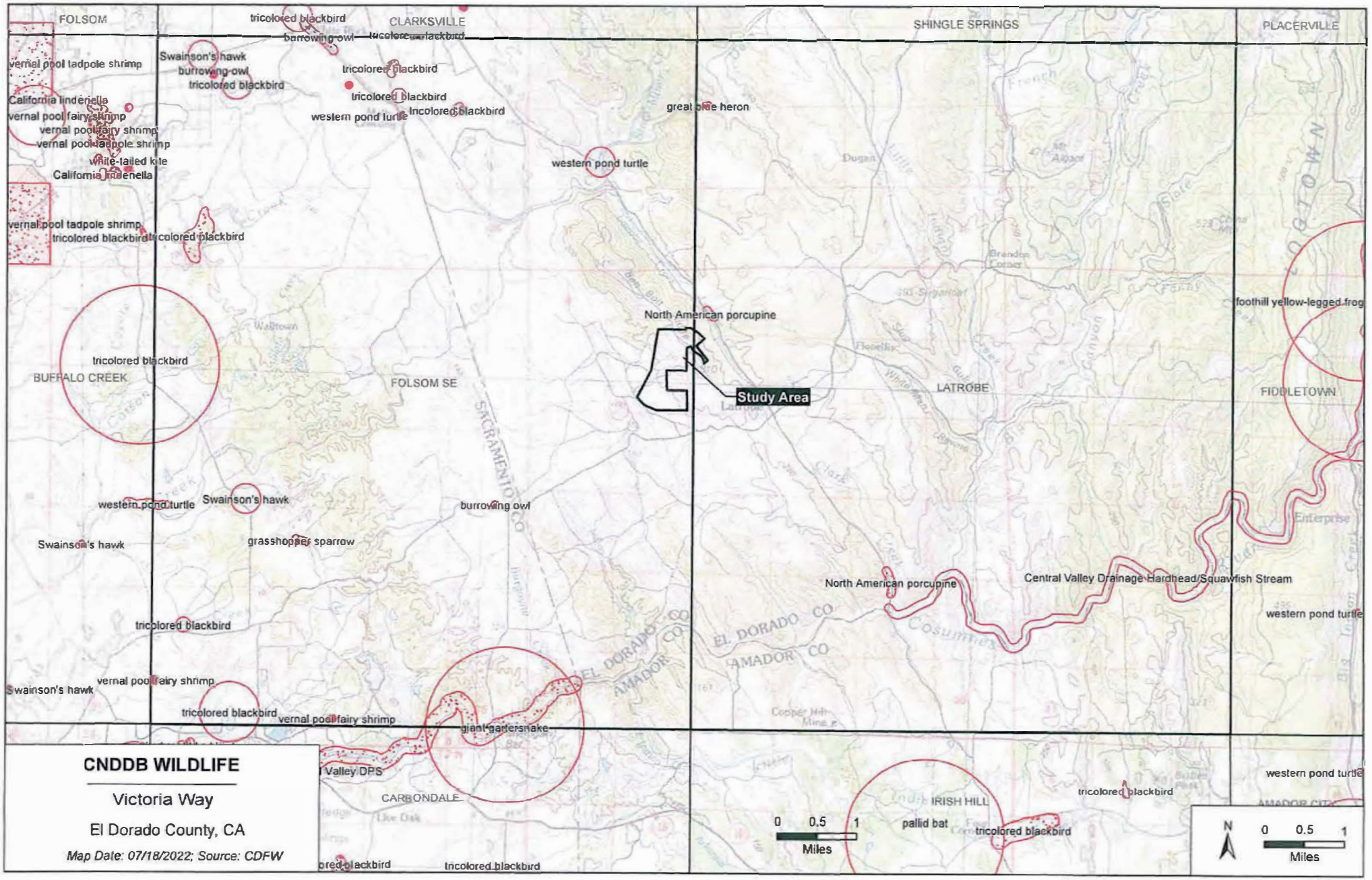
CNDDB PLANT

Victoria Way

El Dorado County, CA

Map Date: 07/18/2022; Source: CDFW

*Figure not OCR compatible.



CNDDB WILDLIFE

Victoria Way

El Dorado County, CA

Map Date: 07/18/2022; Source: CDFW

*Figure not OCR compatible.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

El Dorado County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS

NOT FOR CONSULTATION

Monarch Butterfly Danaus plexippus — Candidate
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus — Threatened
Wherever found
There is **final** critical habitat for this species The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7850

Crustaceans

NAME	STATUS

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened
Wherever found
There is **final** critical habitat for this species The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered
Wherever found
There is **final** critical habitat for this species The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/2246

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

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Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS

NOT FOR CONSULTATION

ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cassin's Finch Carpodacus cassinii — Breeds May 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9462

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

NOT FOR CONSULTATION

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ"Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence(■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.)A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season ( )
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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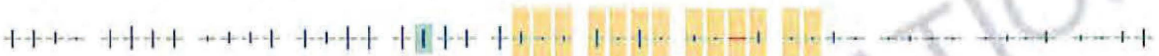
probability of presence breeding season | survey effort – no data

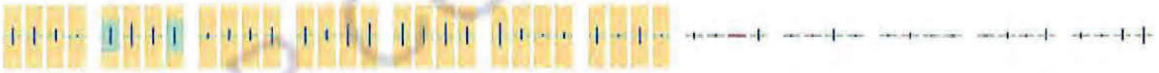
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

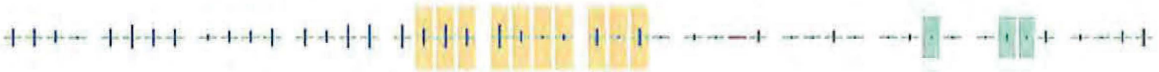
Black Swift BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



California Thrasher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



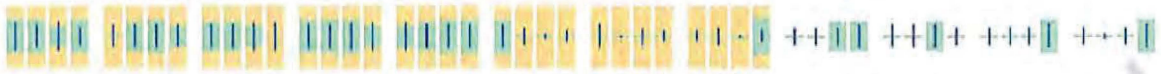
Cassin's Finch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION

Common Yellowthroat BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lawrence's Goldfinch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

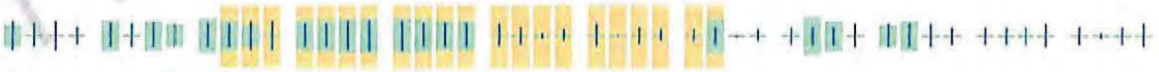
NOT FOR CONSULTATION

Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

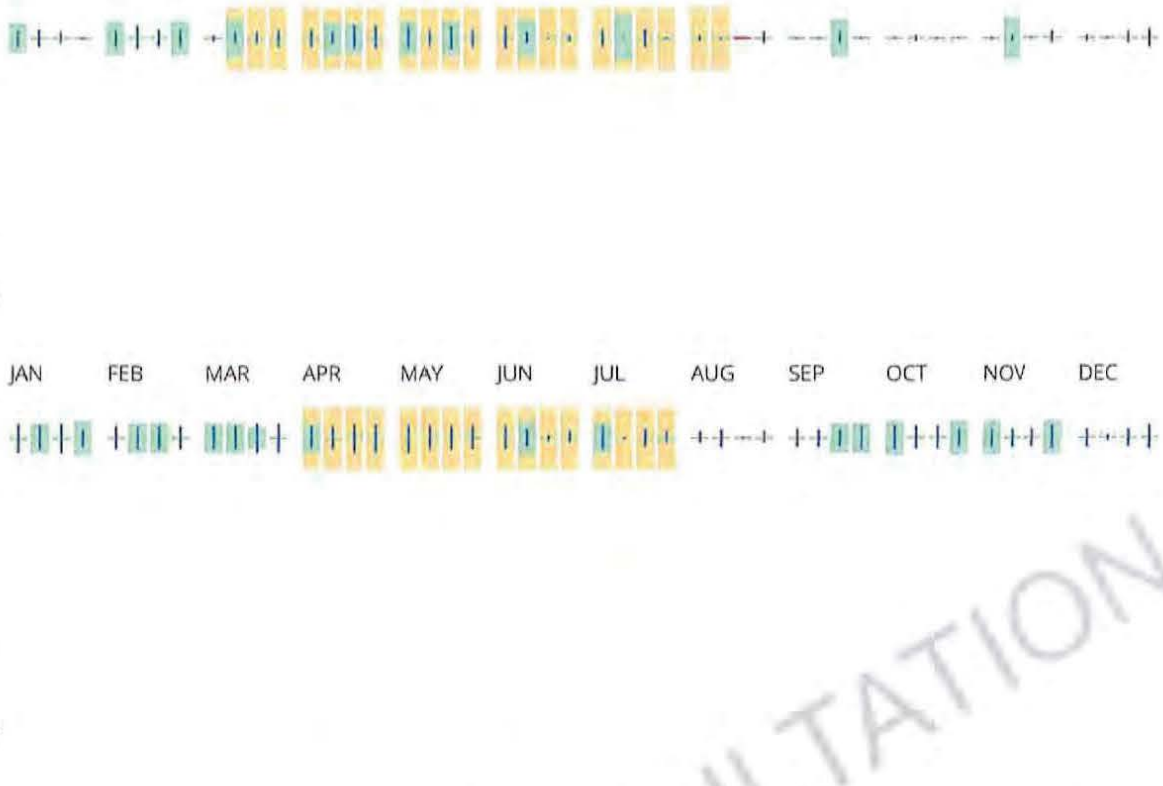
Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Olive-sided Flycatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tricolored Blackbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

NOT FOR CONSULTATION

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

NOT FOR CONSULTATION

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here:https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by theNational Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

NOT FOR CONSULTATION

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND
Palustrine

RIVERINE
Riverine

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Attachment C

Photographs

Annual grassland in the central part of the site, looking southeast; 04/20/22.

Annual grassland in the southeast part of the site, looking west; 05/10/22. There are graded fire breaks along the edges of the site.

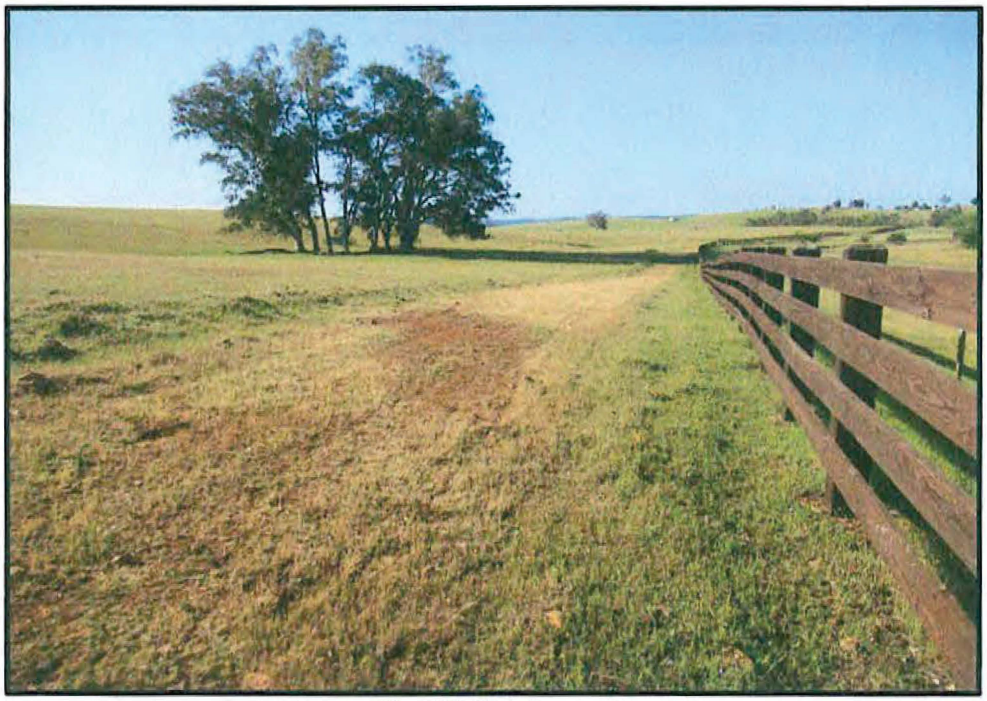
Annual grassland and oak woodland on the east side of Victoria Way, looking northwest; 04/20/22. No building is allowed in this part of Lot A-8.

Annual grassland on the ridgetop in the northeast part of the site, looking north; 04/20/22.

Intermittent creek near the west edge of the site, looking west; 04/20/22.

Intermittent creek, looking northwest toward the confluence with another intermittent creek; 04/20/22.

Oak woodlands in the south part of Lot A-8, looking northwest; 04/20/22.



West edge of the site, looking south; 04/20/22. A pair of red-tailed hawks nested in the cluster of eucalyptus trees in Spring 2022.

Seep on a steep hillside in the north part of the site, looking southwest; 05/10/22.

Seep in the west part of the site, looking southwest; 05/10/22. This small, depressional seep drains in to an intermittent creek.

Attachment D

Rare Plant Survey Report

Salix
consulting, inc.

August 17, 2022

Diane Moore
Moore Biological Consultants
10330 Twin Cities Road, Ste. 30
Galt, CA 95632

RE: Rare Plant Survey for the ±294-acre Victoria Way project, El Dorado County, CA

Dear Ms. Moore:

At your request, we have conducted a rare plant survey at the ±294-acre Victoria Way project site located west of Latrobe Road and north of South Shingle Road near the southwest corner of El Dorado County (Figures 1 and 2). The site is part of a ±519-acre property, APN 087-010-043, that is being split into seven ±40 to ±50 acre parcels, plus a large remainder.

SETTING

Most of the study area is located along a west-facing slope with a portion that crosses over a ridgeline and slopes to the east. Less than half of the eastern parcel has trees and shrubs with only a few small areas on the west side supporting woody vegetation. The site is grazed by cattle and the herbaceous vegetation was quite low in most areas throughout the survey period. A seasonal cattle pond occurs in the southern area of the site and there are no structures.

METHODS

Prior to conducting the field surveys, Salix ran queries of the California Natural Diversity Database (CNDDB, 2022) and the California Native Plant Society database (CNPS, 2022) to determine known locations of special status plants in the region. There are no special status plant species recorded in or near the study area. The nearest species is Sanford's arrowhead (*Sagittaria sanfordii*), located several miles to the southwest in Sacramento County. This species does not occur in the foothills. The pond (marsh) was thoroughly examined for this species.

A complex of eight special status plant species (El Dorado bedstraw, Pine Hill ceanothus, Pine Hill flannelbush, Stebbins' morning-glory, Layne's butterweed, Red Hill soaproot, El Dorado mule-ears, and Bisbee Peak rush-rose) occurs over a broad area to the north of the study area on gabbro soils. These plants have very specific growing needs and do not occur on common soils such as those that occur in the study area. Gabbro soils have unusual properties derived from the underlying gabbro rock; they are generally red, mildly acidic,

rich in iron and magnesium, and often contain other heavy metals such as chromium. Gabbro soils cover approximately 30,000 acres in western El Dorado County.

This rare plant survey was floristic in nature with the goal of determining each plant species encountered to is lowest taxonomic level, or at least to the level to determine if it is a rare species or not. The survey was conducted in general conformance with the *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018).

Surveys were conducted on April 20, May 10 and July 8, 2022. An ATV was utilized to cover as much ground as possible and foot travel was conducted to examine all drainages, rock outcrops, the pond, and steep areas. Plant species were recorded as observed and unknown species were collected and keyed out in the lab.

FINDINGS

Soils

Five soil units are mapped within the study area:

- Argonaut gravelly loam, 2 to 15 percent slopes
- Argonaut very rocky loam, 3 to 30 percent slopes
- Auburn very rocky silt loam, 2 to 30 percent slopes
- Auburn extremely rocky silt loam, 3 to 70 percent slopes
- Perkins gravelly loam, moderately deep variant, 2 to 5 percent slopes

The Argonaut series (fine, mixed, superactive, thermic Mollic Haploxeralfs) consists of moderately deep, well drained soils that formed in materials weathered from meta-andesite. Argonaut soils are on foothills with slopes of 2 to 30 percent. The mean annual precipitation is 27 inches and the mean annual temperature is about 60 degrees F.

The Auburn series (loamy, mixed, superactive, thermic Lithic Haploxerepts) consists of shallow to moderately deep, well drained soils formed in material weathered from amphibolite schist. Auburn soils are on foothills and have slopes of 2 to 75 percent. The mean annual precipitation is about 24 inches, and the mean annual air temperature is about 61 degrees F.

The Perkins series (fine-loamy, mixed, superactive, thermic Mollic Haploxeralfs) consists of very deep, well drained soils that formed in alluvium derived from mixed rock sources. Perkins soils are on terraces and have slopes of 0 to 30 percent. The mean annual precipitation is about 24 inches, and the mean annual air temperature is about 62 degrees F.

These soils series are typical and common in the lower foothills of this region of the Sierra. None of these soil series have gabbro or serpentine properties and do not generally support rare plant species. Natural Resources Conservations Service (NRCS) soil mapping is presented in Figure 3.

Hydrology

Water movement through the property is primarily sheet flow draining through minor surface features. There are no large drainages or aquatic features on the property. There is one shallow pond created by a berm with an intermittent stream in the western area of the site. This feature is densely vegetated (with cattails) with very little open water in the basin.

There are several groundwater seeps on the property with minor discharge that do not produce flows in excess of a trickle.

Vegetation

Most of the property is annual grassland. The most common species observed throughout the site include soft chess (*Bromus hordeaceous*), red-stem filaree (*Erodium cicutarium*), and long-beaked hawkbit (*Leontodon saxatilis*). Other common species include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), virgate tarweed (*Holocarpha virgata*), silver European hairgrass (*Aira caryophyllea*), rose clover (*Trifolium hirtum*), medusahead (*Elymus caput-medusae*), barbed goatgrass (*Aegilops triuncialis*), Italian thistle (*Carduus pycnocephalus*), prickly lettuce (*Lactuca serriola*), fitch's spikeweed (*Centromadia fitchii*), and Spanish lotus (*Acmispon americanus*).

Species around the rock outcrops were quite similar to the grassland but included a few species not observed in surrounding areas such as woodland threadstem (*Pterostegia drymarioides*) and spike moss (*Selaginella* sp.).

The drainages support an occasional woody plant such as hoary coffeeberry (*Frangula californica)* but also herbaceous species including caterpillar phacelia (*Phacelia cicutaria*) and June centaury (*Zeltnera muehlenbergii*). Water flow in many portions of the drainages is quite ephemeral throughout the site and the corresponding vegetation in these areas is mostly upland species.

The seeps are a more robust aquatic community and include soft rush (*Juncus effusus*), annual beard grass (*Polypogon monspeliensis*), pennyroyal (*Mentha pulegium*), hairy willow-herb (*Epilobium ciliatum*), tall flatsedge (*Cyperus eragrostis*) and hyssop loosestrife (*Lythrum hyssopifolium*). Seepy sections along some of the creeks in the site support several of these same hydrophytes, as well as species such as common spikerush (*Eleocharis macrostachya*) and seep-spring monkeyflower (*Erythanthe guttata*).

A list of species observed in the study area during the 2022 surveys is provided in Appendix A. Aerial and ground photos of various areas and components of study area are presented in Figures 4a-4f.

CONCLUSION

A floristic rare plant survey was conducted on the 294-acre Victoria Way project site located in southwest El Dorado County on April 20, May 10 and July 8, 2022. The site does not contain particular habitats or soil types that would typically support rare plant species. The property was thoroughly examined throughout the blooming season for special status species and none were detected.

Thank you for the opportunity to conduct this survey. Please contact me if you have any questions.

Sincerely,

Jeff Glazner
Principal Biologist/Botanist

Attachments:

Figure 1. Site and Vicinity Map
Figure 2. Aerial Map
Figure 3. Soil Components
Figures 4a-f. Site photos

Appendix A. List of Plants Observed within the Study Area, April, May, July, 2022

REFERENCES

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 15 April 2022].

CDFW (California Department of Fish and Wildlife). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959

CNDDB (California Natural Diversity Database). 2022. California Department of Fish and Wildlife's Natural Heritage Program, Sacramento, California.

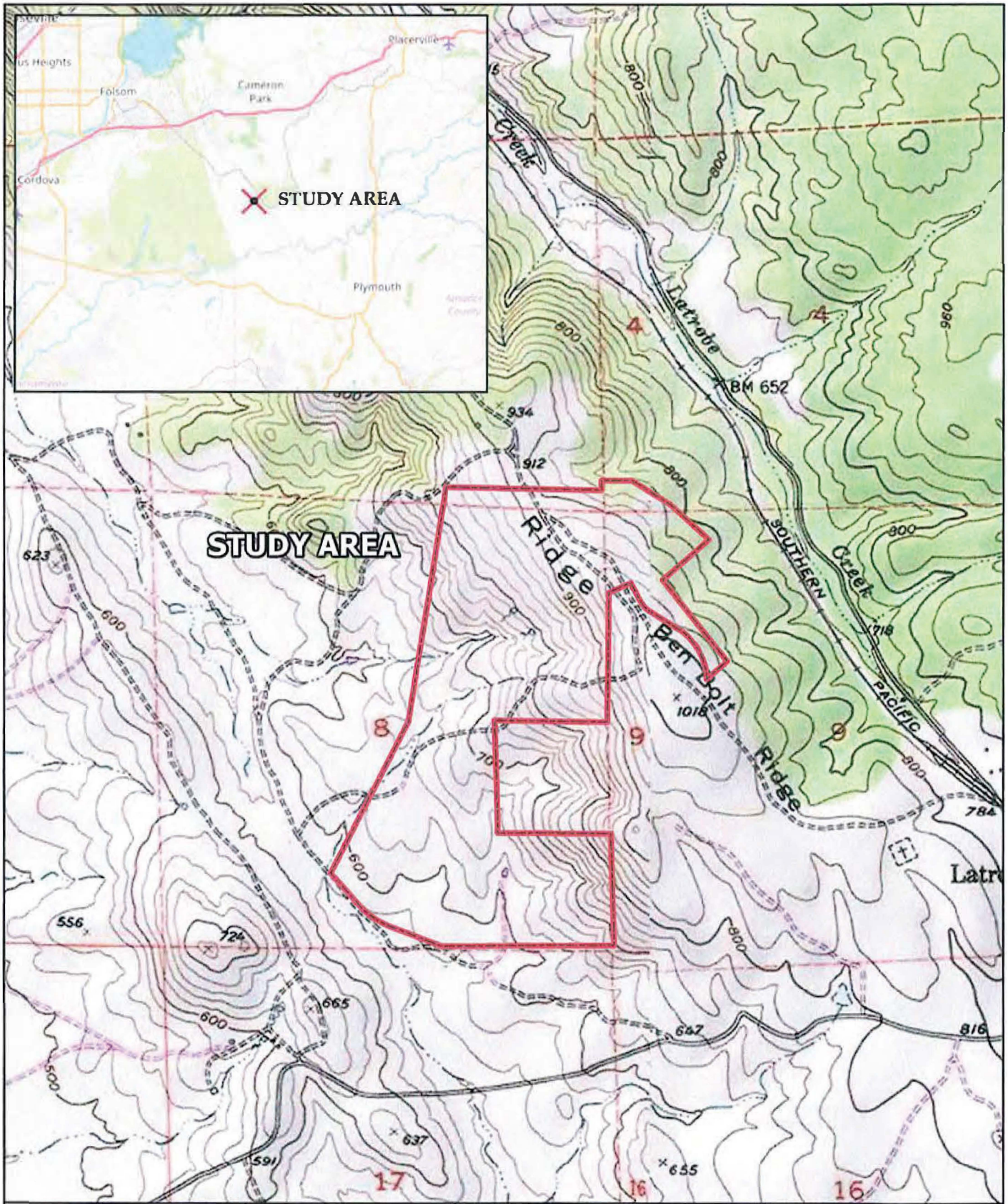
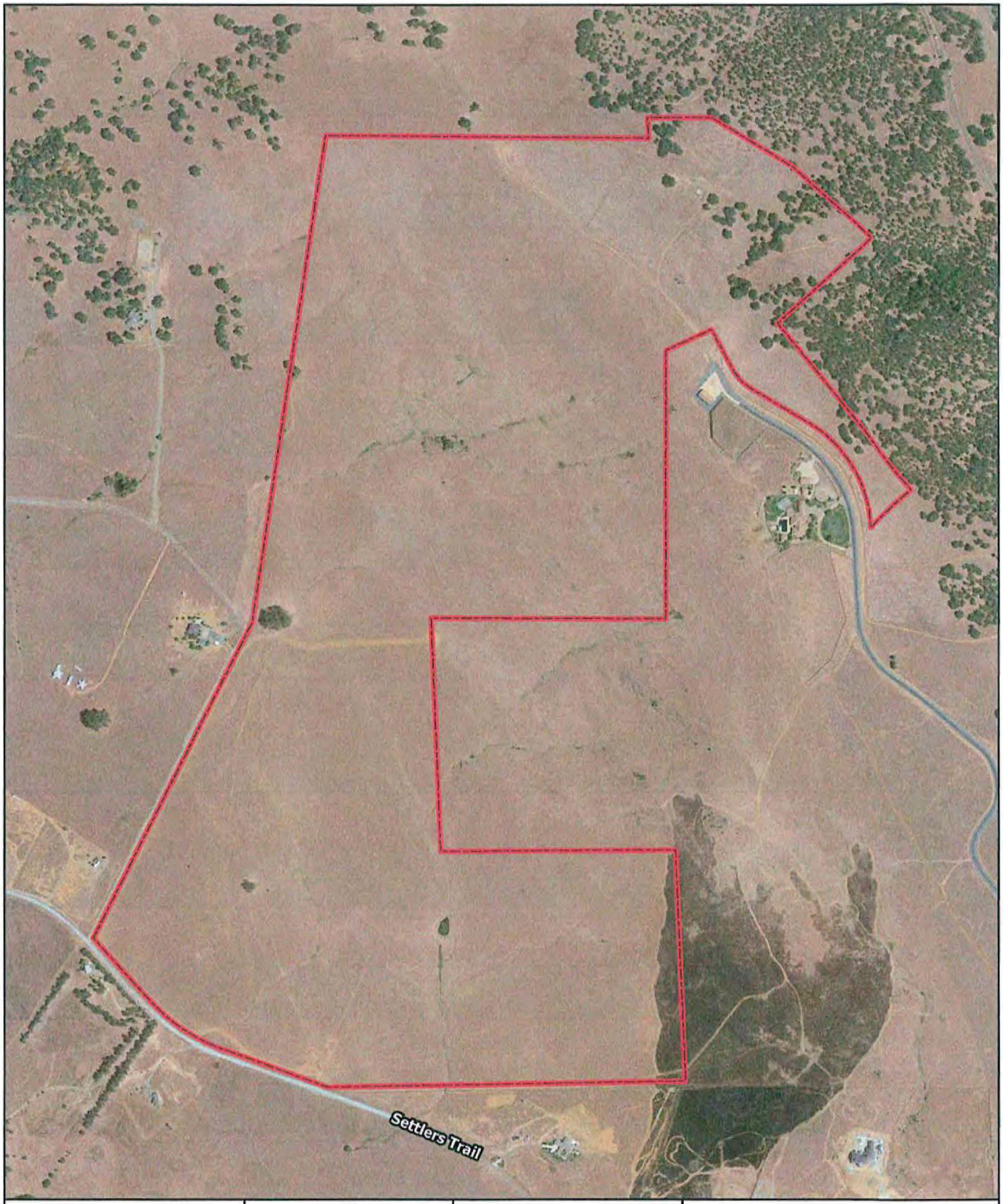


*Figure not OCR compatible.



Salix consulting, inc.

N

0 400 800

Feet

Study Area (±294 acres)

Aerial Source: Google Earth (06/2021)

Figure 2

AERIAL MAP

Victoria Way

El Dorado County, CA

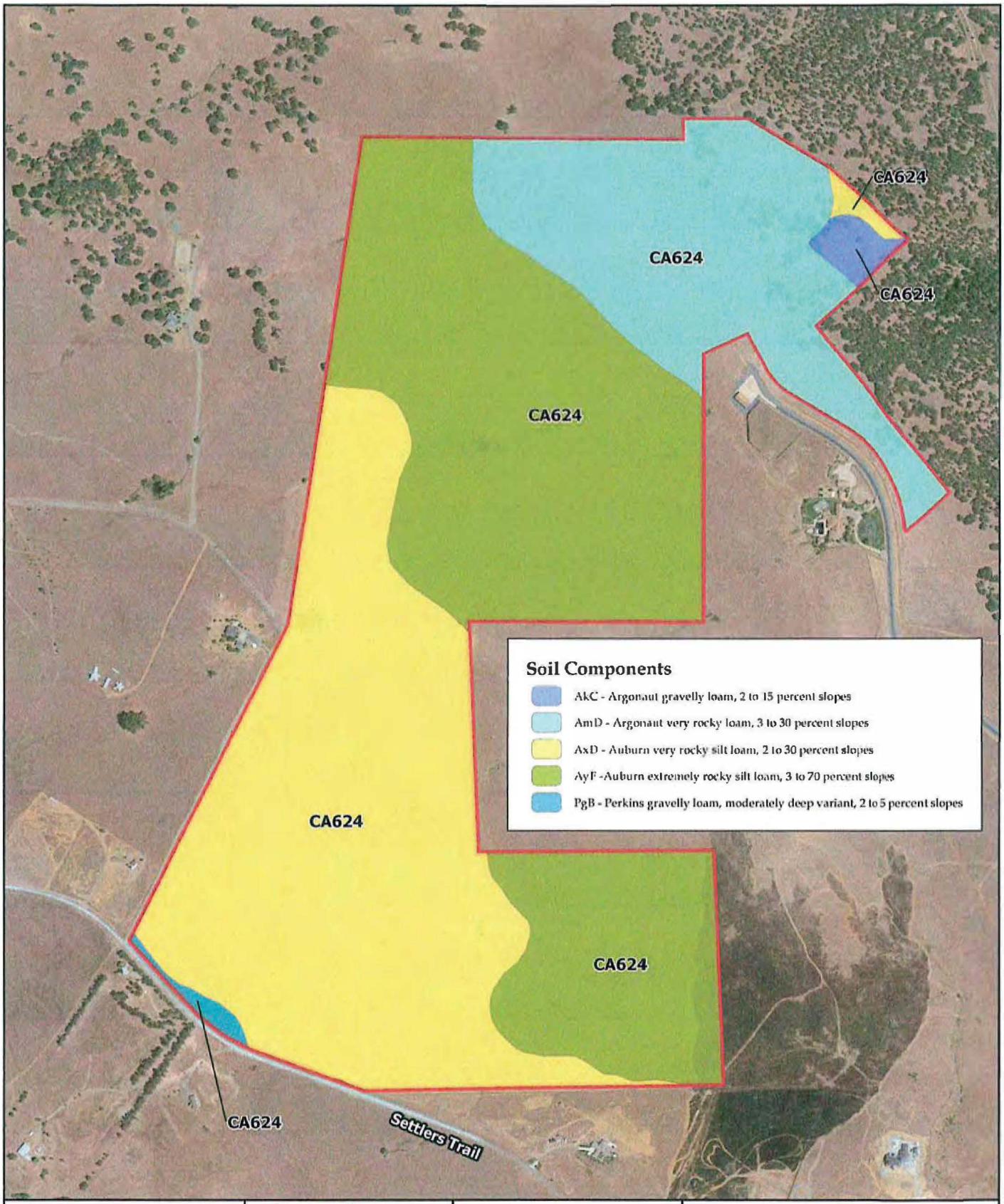


*Figure not OCR compatible.

Looking southeast over study area. *Photo Date 4-20-22*

Looking southwest over study area.. *Photo Date 4-20-22*

Salix consulting, inc.

Figure 4a

AERIAL PHOTOS

Victoria Way

El Dorado County, CA

Looking northeast over ridgeline and northeast area of study area. *Photo Date 4-20-22*

Looking down on one of groundwater seeps in study area. Dark granular plant is common rush (*Juncus effusus*) *Photo Date 4-20-22*

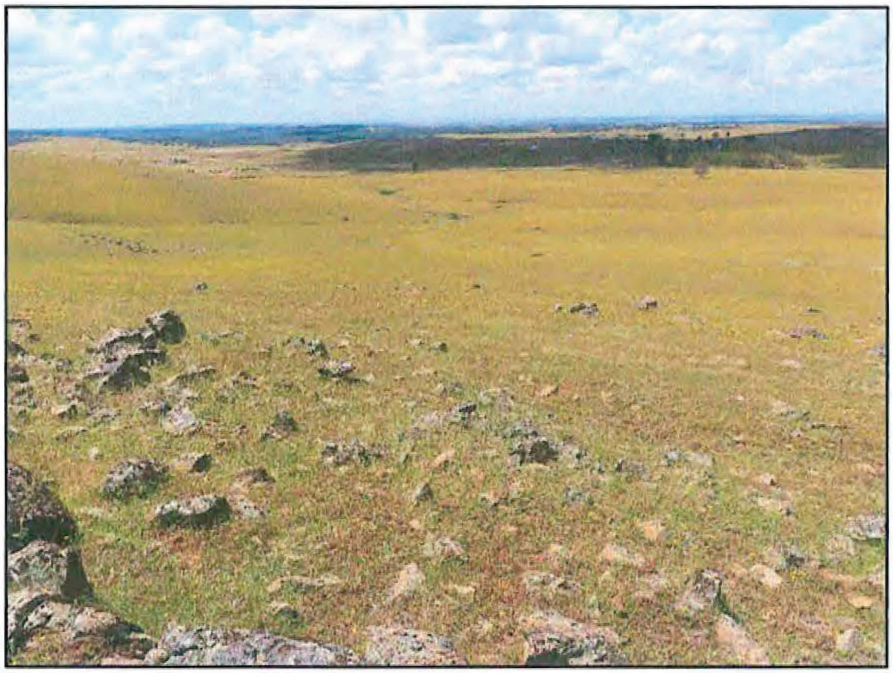
Salix consulting, inc.

Figure 4b

AERIAL PHOTOS

Victoria Way

El Dorado County, CA



Looking southwest over western portion of study area.
Photo date 5-10-22

Looking northeast from near Settlers Trail Rd over southern area of site. *Photo date 5-10-22*

Salix consulting, inc.

Figure 4c

SITE PHOTOS

Victoria Way

El Dorado County, CA

Looking north over central area of site. *Photo date 4-20-22*

Oak woodland area in eastern area of site. Most of the trees are blue oak (*Quercus douglasii*). *Photo date 4-20-22*

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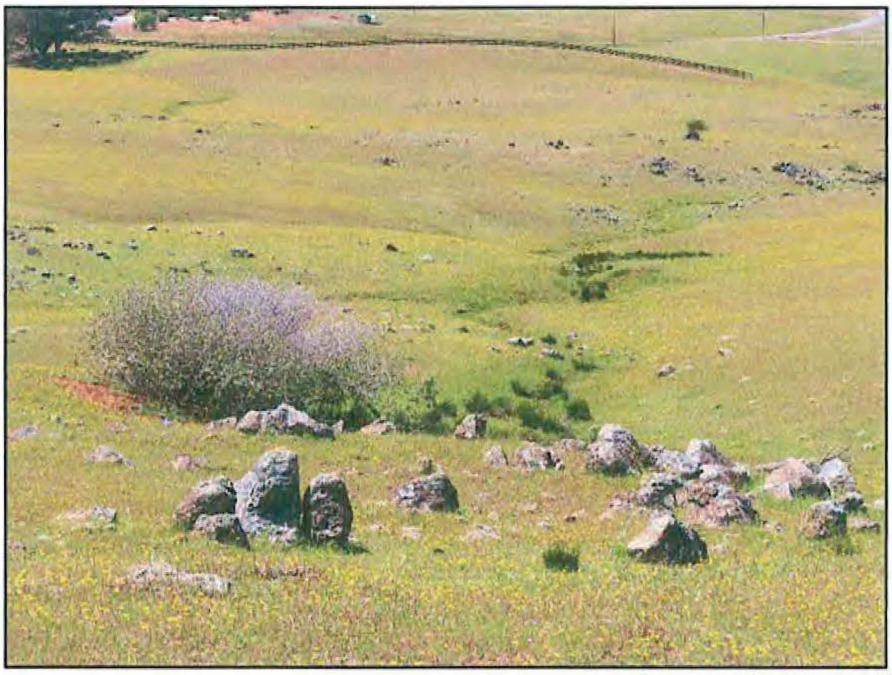
Figure 4d

SITE PHOTOS

Victoria Way

El Dorado County, CA



Looking west over seep in central area of site.
Photo date 4-20-22

One of seeps in northcentral area of site. *Photo date 7-8-22*

Salix consulting, inc.

Figure 4e

SITE PHOTOS

Victoria Way

El Dorado County, CA

Pond in mid spring.
Photo date 4-20-22

Pond in early summer. *Photo date 7-8-22*

Salix consulting, inc.

Figure 4f

SITE PHOTOS

Victoria Way

El Dorado County, CA

Appendix A

Victoria Way Plants Observed 4/20, 5/10 & 7/8/2022

Angiosperms - Dicots

Anacardiaceae - Cashew or Sumac Family

Toxicodendron diversilobum	Western poison-oak

Apiaceae (Umbelliferae) - Carrot Family

Daucus pusillus	Rattlesnake weed
Eryngium castrense	Great Valley coyote-thistle
**Torilis arvensis*	Field hedgeparsley

Asteraceae (Compositae) - Sunflower Family

Baccharis pilularis	Coyote brush
**Carduus pycnocephalus*	Italian thistle
**Centaurea melitensis*	Tocalote
**Centaurea solstitialis*	Yellow starthistle
Centromadia fitchii	Fitch's spikeweed
**Cirsium vulgare*	Bull thistle
Grindelia camporum	Great Valley gumplant
Holocarpha virgata subsp. virgata	Virgate tarweed
**Hypochaeris glabra*	Smooth cat's-ear
**Lactuca serriola*	Prickly lettuce
Lasthenia californica subsp. californica	California goldfields
**Leontodon saxatilis*	Long-beaked hawkbit
**Logfia gallica*	Narrowleaf cottonrose
Micropus californicus	Q tips
Pseudognaphalium californicum	California everlasting
**Senecio vulgaris*	Common groundsel
**Silybum marianum*	Milk thistle
**Sonchus asper subsp. asper*	Prickly sow-thistle
**Sonchus oleraceus*	Common sow-thistle
Xanthium strumarium	Cocklebur

Boraginaceae - Borage Family

Phacelia cicutaria var. cicutaria	Caterpillar phacelia
Plagiobothrys nothofulvus	Rusty popcornflower

Brassicaceae (Cruciferae) - Mustard Family

**Brassica nigra*	Black mustard
**Capsella bursa-pastoris*	Shepherd's purse
**Hirschfeldia incana*	Short-podded mustard
Lepidium nitidum	Shining peppergrass
Nasturtium officinale	Watercress
**Raphanus sativus*	Wild radish
**Sisymbrium officinale*	Hedge mustard
Thysanocarpus curvipes	Lacepod

Caryophyllaceae - Pink Family

**Petrorhagia dubia*	Grass-pink

**Silene gallica*	Windmill-pink
**Spergularia rubra*	Ruby sand-spurrey
**Stellaria media*	Common chickweed

Crassulaceae - Stonecrop Family

**Crassula tillaea*	Moss pygmy-weed

Euphorbiaceae - Spurge Family

Croton setiger	Turkey mullein

Fabaceae (Leguminosae) - Legume Family

Acmispon americanus	Spanish lotus
Lupinus bicolor	Miniature lupine
Lupinus nanus	Sky lupine
**Medicago polymorpha*	California burclover
Trifolium depauperatum	Dwarf sack clover
**Trifolium dubium*	Little hop clover
**Trifolium hirtum*	Rose clover
Trifolium microcephalum	Small-headed clover
Trifolium variegatum	Whitetip clover
**Vicia sativa*	Common vetch
**Vicia villosa*	Winter vetch

Fagaceae - Oak Family

Quercus douglasii	Blue oak
Quercus lobata	Valley oak
Quercus wislizeni	Interior live oak

Gentianaceae - Gentian Family

Zeltnera muehlenbergii	June centaury

Geraniaceae - Geranium Family

**Erodium botrys*	Broad-leaf filaree
**Erodium cicutarium*	Red-stem filaree
**Geranium dissectum*	Cut-leaf geranium
**Geranium molle*	Dove's-foot geranium

Hypericaceae - St. John's Wort Family

**Hypericum perforatum subsp. perforatum*	Klamathweed

Lamiaceae (Labiatae) - Mint Family

**Mentha pulegium*	Pennyroyal
Pogogyne zizphoroides	Sacramento mesamint
Stachys albens	White-stem hedgenettle

Linaceae - Flax Family

**Linum bienne*	Narrowleaf flax

Lythraceae - Loosestrife Family

**Lythrum hyssopifolia*	Hyssop loosestrife

Moraceae - Mulberry Family

**Ficus carica*	Common fig

Myrsinaceae - Myrsine Family

**Lysimachia arvensis*	Scarlet pimpernel

Myrtaceae - Myrtle Family

**Eucalyptus globulus*	Blue gum

Onagraceae - Evening Primrose Family

Clarkia purpurea subsp. quadrivulnera	Four spot
Epilobium brachycarpum	Summer cottonweed
Epilobium ciliatum	Hairy willow-herb
Epilobium densiflorum	Dense-flower spike-primrose

Orobanchaceae - Broomrape Family

Castilleja attenuata	Valley tassels
Triphysaria eriantha	Butter-and-eggs

Phrymaceae - Lopseed Family

Erythranthe guttata	Common monkeyflower

Plantaginaceae - Plantain Family

Collinsia heterophylla	Chinese houses
Plantago erecta	California plantain
**Plantago lanceolata*	English plantain

Polemoniaceae - Phlox Family

Navarretia intertexta	Needle-leaved navarretia

Polygonaceae - Buckwheat Family

**Persicaria hydropiper*	Waterpepper
**Polygonum aviculare*	Common knotweed
Pterostegia drymarioides	Woodland threadstem
**Rumex acetosella*	Sheep sorrel
**Rumex crispus*	Curly dock
**Rumex pulcher*	Fiddle dock

Ranunculaceae - Buttercup Family

Delphinium variegatum subsp. variegatum	Royal larkspur
Ranunculus aquatilis	Aquatic buttercup
**Ranunculus muricatus*	Spiny-fruit buttercup

Rhamnaceae - Buckthorn Family

Frangula californica subsp. tomentella	Hoary coffeeberry

Rosaceae - Rose Family

Drymocallis glandulosa	Sticky cinquefoil
Heteromeles arbutifolia	Toyon

Salicaceae - Willow Family

Salix laevigata	Red willow

Sapindaceae - Soapberry Family

Aesculus californica	California buckeye

Scrophulariaceae - Figwort Family

Scrophularia californica	California figwort
**Verbascum blattaria*	Moth mullein

Angiosperms -Monocots

Agavaceae - Agave Family

Chlorogalum pomeridianum	Soaproot

Alismataceae - Water-Plantain Family

Alisma triviale	California water plantain

* Indicates a non-native species

Cyperaceae - Sedge Family

Cyperus eragrostis	Tall flatsedge
Eleocharis acicularis	Least spikerush
Eleocharis macrostachya	Creeping spikerush

Juncaceae - Rush Family

Juncus balticus	Baltic rush
Juncus bufonius	Toad rush
**Juncus effusus*	Soft rush
Luzula comosa	Hairy wood rush

Liliaceae - Lily Family

Calochortus luteus	Yellow mariposa-lily

Poaceae (Gramineae) - Grass Family

**Aegilops triuncialis*	Barbed goatgrass
**Aira caryophyllea*	Silver European hairgrass
**Avena fatua*	Wild oat
**Briza minor*	Small quaking grass
**Bromus diandrus*	Ripgut grass
**Bromus hordeaceus*	Soft chess
**Bromus madritensis subsp. rubens*	Red brome
**Cynodon dactylon*	Bermudagrass
**Cynosurus echinatus*	Hedgehog dogtail
**Digitaria sanguinalis*	Hairy crabgrass
**Elymus caput-medusae*	Medusahead
Festuca microstachys	Small fescue
**Festuca myuros*	Rattail sixweeks grass
**Festuca perennis*	Italian ryegrass
**Gastridium phleoides*	Nit grass
**Hordeum marinum subsp. gussoneanum*	Mediterranean barley
**Hordeum murinum*	Wall barley
**Poa annua*	Annual bluegrass
**Poa bulbosa subsp. vivipara*	Bulbous bluegrass
**Polypogon monspeliensis*	Annual beard grass
Stipa pulchra	Purple needlegrass

Themidaceae - Brodiaea Family

Brodiaea elegans subsp. elegans	Elegant harvest brodiaea
Brodiaea minor	Dwarf brodiaea
Dichelostemma capitatum subsp. capitatum	Bluedicks
Dichelostemma multiflorum	Wild hyacinth
Dichelostemma volubile	Twining brodiaea
Triteleia hyacinthina	White triteleia
Triteleia laxa	Ithuriel's spear

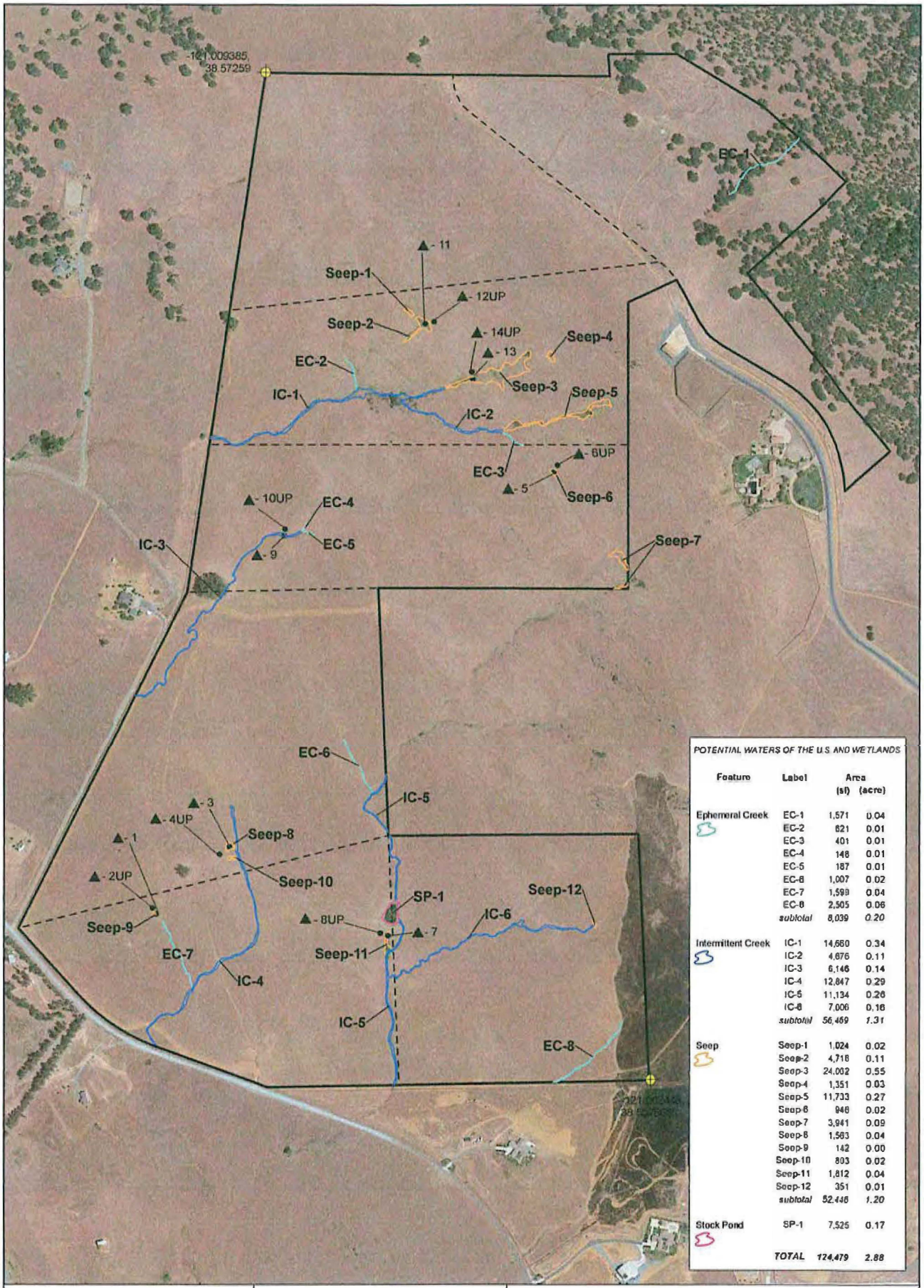
Typhaceae - Cattail Family

Typha latifolia	Broad-leaved cattail

* Indicates a non-native species

Attachment E

Wetland Delineation Map



POTENTIAL WATERS OF THE U.S. AND WETLANDS

Feature	Label	Area (sf)	Area (acre)
Ephemeral Creek	EC-1	1,571	0.04
	EC-2	821	0.01
	EC-3	401	0.01
	EC-4	148	0.01
	EC-5	187	0.01
	EC-6	1,007	0.02
	EC-7	1,599	0.04
	EC-8	2,505	0.06
	subtotal	8,039	*0.20*
Intermittent Creek	IC-1	14,660	0.34
	IC-2	4,876	0.11
	IC-3	6,146	0.14
	IC-4	12,847	0.29
	IC-5	11,134	0.26
	IC-6	7,006	0.16
	subtotal	56,469	*1.31*
Seep	Seep-1	1,024	0.02
	Seep-2	4,718	0.11
	Seep-3	24,002	0.55
	Seep-4	1,351	0.03
	Seep-5	11,733	0.27
	Seep-6	946	0.02
	Seep-7	3,941	0.09
	Seep-8	1,563	0.04
	Seep-9	142	0.00
	Seep-10	803	0.02
	Seep-11	1,812	0.04
	Seep-12	351	0.01
	subtotal	52,446	*1.20*
Stock Pond	SP-1	7,525	0.17
	TOTAL	*124,479*	*2.88*

Data Disclaimer:
The delineation has been done in accordance with the 1987 Wetlands Delineation Manual, US Army Corps of Engineers and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.

Aerial Source: Google Earth (05/2021)

Moore Biological Consultants

Study Area (±294 acres)

▲-1 3-Parameter Data Point

0 250 500

N

Aquatic Resources Map

Victoria Way

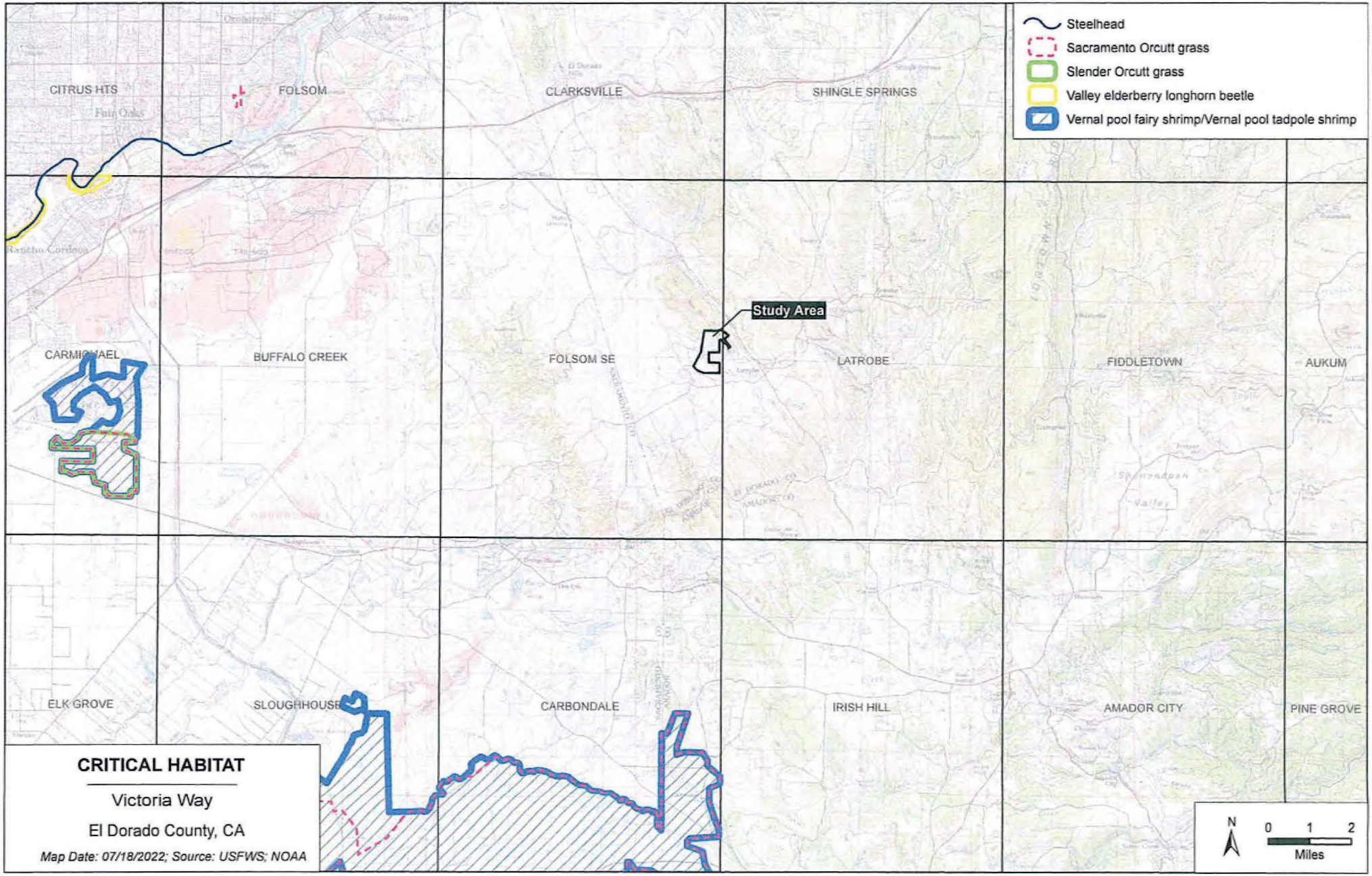
El Dorado County, CA

Map Date: 08/03/2022

*Figure not OCR compatible.

Attachment F

Designated Critical Habitat



CRITICAL HABITAT

Victoria Way

El Dorado County, CA

Map Date: 07/18/2022; Source: USFWS; NOAA

APPENDIX C

AQUATIC RESOURCES DELINEATION

RECEIVED
JAN 05 2023
EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

Routine Wetland Delineation

294+/- Acre "VICTORIA WAY" SITE

El Dorado County, California

Prepared for:

Alder Mountain Millworks, Inc.
4617 Weed Patch Court
Greenwood, CA 95635

Prepared by:

Moore Biological Consultants
10330 Twin Cities, Suite 30
Galt, CA 95362
(209) 745-1159

August 2022

TM22-0004

TABLE OF CONTENTS

	Page
I. Introduction	1
II. Methods	4
Waters of the U.S.	4
Wetlands	4
Field Mapping	6
III. Results	6
Environmental Setting	6
Potential Waters of the U.S. and Wetlands	9
IV. Conclusions	14
V. References	15

APPENDICES

APPENDIX A	Wetland Map
APPENDIX B	3-parameter Data Sheets
APPENDIX C	Photographs
APPENDIX D	National Wetland Inventory Map

TABLE

TABLE 1 Plant List	8

FIGURES

FIGURE 1 Vicinity Map	2
FIGURE 2 USGS Map	3
FIGURE 3 Soils Map	10

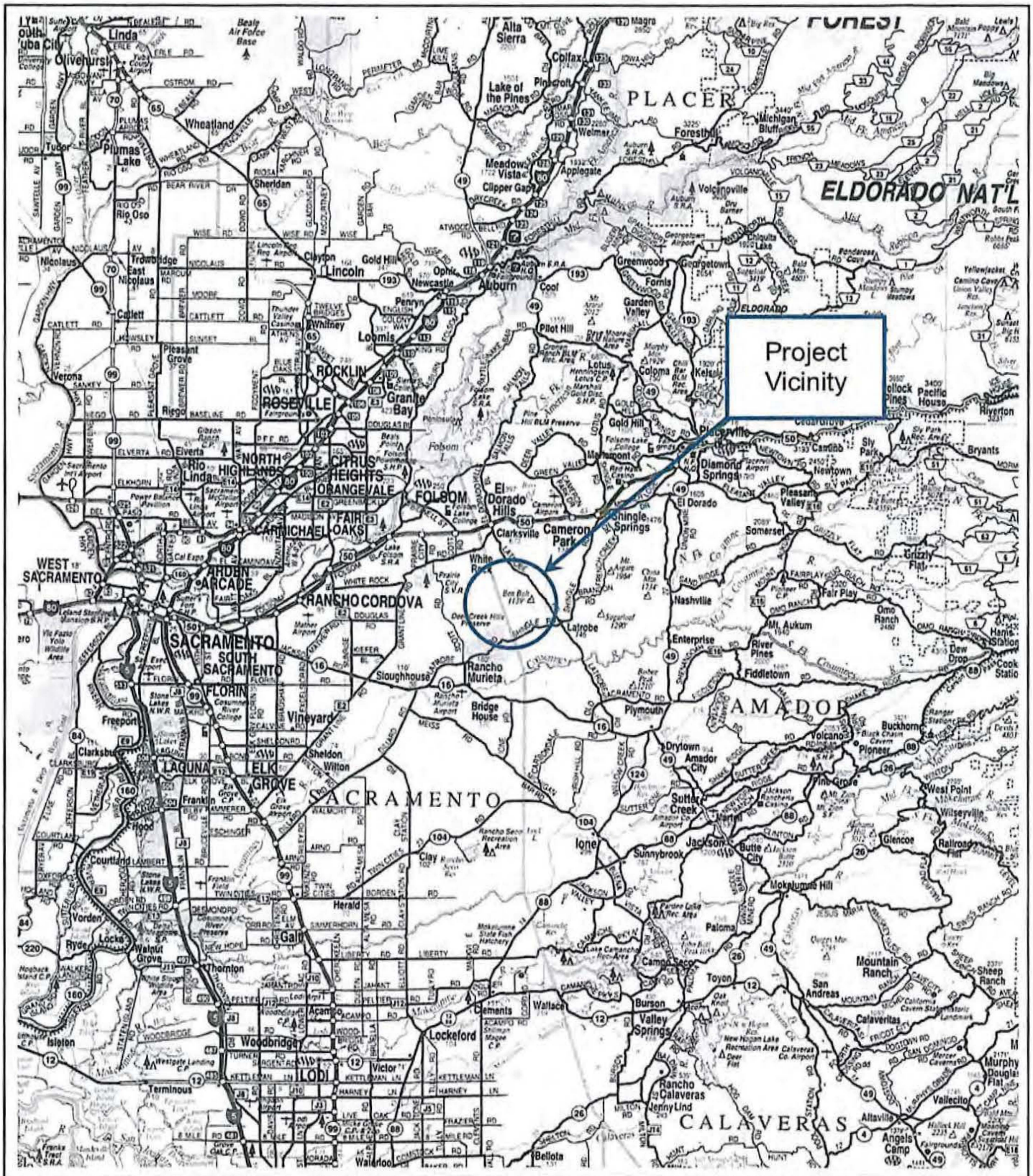
I. INTRODUCTION

The 294+/- acre "Victoria Way" site is near the historic town of Latrobe in western El Dorado County, California (Figure 1). The site is in Sections 4, 5, 8 and 9 in Township 8 North, Range 9 East of the USGS 7.5-minute Latrobe and Folsom SE topographic quadrangles (Figure 2). The site is envisioned for large-parcel residential development.

The site is accessible by taking Highway 50 east from Sacramento for approximately 24 miles until the Latrobe Road exit. Turn right on Latrobe Road and travel south approximately 8.5 miles to South Shingle Road. Turn right (west) on South Shingle Road and drive approximately 1.5 miles to Settlers Trail. Turn right (north) on Settlers Trail for approximately 0.5 miles. The site is on the right side of Settlers Trail, with access in to the site via a gated farm road entrance. The gate will need to be opened by the land owner.

The property consists of relatively steep and rolling hills. The site slopes down generally to the southwest, and site elevations range from approximately 600 to 900 feet above mean sea level. The site is primarily vegetated with annual grassland vegetation; a few trees and shrubs are scattered across the grasslands. There is a patch of oak woodland vegetation in the northeast part of the site. While the majority of the site is uplands (i.e., not "wetlands"), there are several intermittent and ephemeral creeks, numerous seeps, and a stock pond in the site.

Surrounding land uses in this portion of El Dorado County are primarily agriculture and open space, interspersed with large homes on expansive parcels. Settlers Trail is situated along a portion of the south edge of the site and part of the west edge of the site. The remaining edges of the site are adjacent to open grassland fields, similar to those in the site, and areas of oak woodland. There are several homes on relatively large parcels further west and south of the site.



Source: California State Automobile Association

Moore Biological Consultants

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FIGURE 1

PROJECT VICINITY

*Figure not OCR compatible.

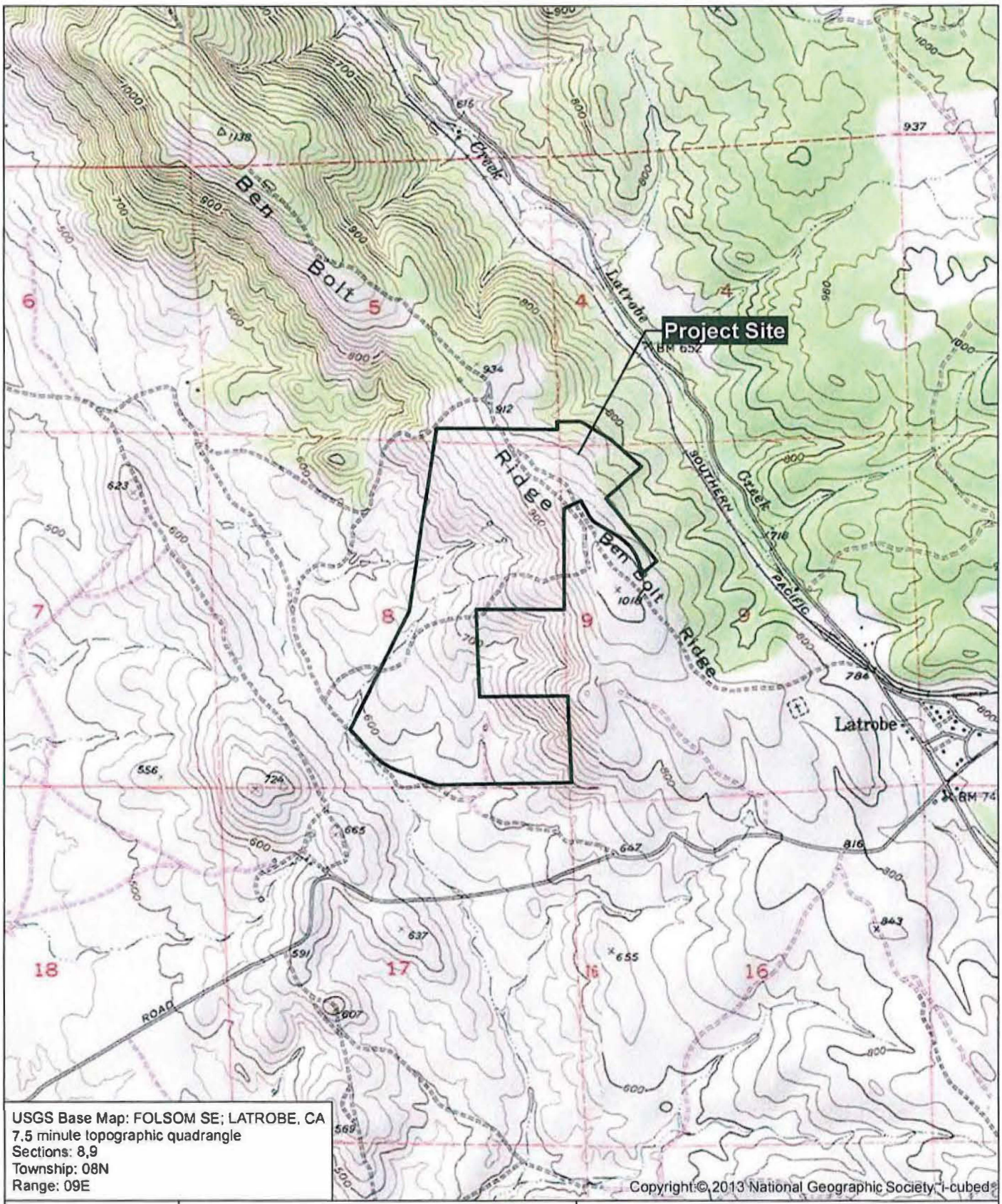


Figure 2

Moore Biological Consultants

0 1,000 2,000

N W E S

USGS

Victoria Way

El Dorado County, CA

Map Date: 07/19/2020

*Figure not OCR compatible.

This wetland delineation documents the locations, types and extent of Waters of the U.S., including wetlands within the project site that may be regulated by the U.S. Army Corps of Engineers (ACOE). The delineation was conducted in support of residential development in portions of the site.

II. METHODS

Waters of the U.S.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes many interstate and intrastate rivers and streams, as well as a number of intermittent streams and their tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. generally extends to the "ordinary high water mark" (OHWM). The OHWM is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Wetlands

Wetlands are a subset of Waters of the U.S. The ACOE Wetlands Delineation Manual (1987) and 2008 Regional Supplement require the presence of three criteria for delineating wetlands: 1) hydrophytic vegetation; 2) hydric soils; and 3) wetland hydrology. Wetland delineation incorporates analysis of vegetation to identify wetlands species and their wetlands indicator status, soil sampling to identify hydric soils, and an evaluation of the site's hydrology. Generally, all three criteria must be met for an area to be delineated as a wetland.

VEGETATION: Hydrophytic vegetation is defined as vegetation adapted to growth in water or on a substrate that is at least periodically deficient in oxygen as a result of saturation. The ACOE manual assigns wetland plant species to four

categories based on frequency of occurrence in wetlands: 1) obligate wetlands species that occur in wetlands 99 percent of the time; 2) facultative wetlands plants that occur in wetlands 67 to 99 percent of the time; 3) facultative plants that are equally likely to occur in wetlands or uplands; and 4) facultative upland plants that occur in uplands 67 to 99 percent of the time. If 50 percent or greater of the dominant plant species are rated as obligate, facultative, or facultative wetland species, the area is considered to have wetland vegetation.

Field determinations for the presence of hydrophytic vegetation were conducted by visually assessing plant community composition. Plants were identified and categorized into one of the four classifications of hydrophytic vegetation. Wetland indicator status of each species was determined using the *National Wetland Plant List: Arid West 2020 Regional Wetland Plant List* (ACOE, 2020).

SOILS: Hydric soil is a soil that is saturated, flooded, or inundated for long enough to develop conditions that favor the growth of hydrophytic plants. Soil color reflects the presence of water in the soil and is the primary factor used to determine whether or not a soil is hydric. The Munsell Soil Chart (Munsell, 1988), which classifies soils according to three criteria: 1) color; 2) lightness or darkness of the color; and 3) chroma, which is the purity or saturation of the color, is used to visually determine soil color. Hydric soils usually have a low chroma value and often contain redoximorphic features such as redox concentrations (mottles, oxidized rhizospheres), and redox depletions that are areas of different color interspersed within the dominant matrix color of the soil.

Soils were sampled within the survey area to determine the location and extent of any hydric soils. Soils were collected with a shovel and visually assessed for color, mottling, and hydric characteristics.

HYDROLOGY: A wetland requires inundation or soil saturation for a significant period (i.e., a minimum of about 2 weeks) during the growing season. For example, wetlands can be found both along streams and rivers where flooding is

likely to occur and also in low, depressed areas where groundwater discharges to the surface or where an impervious layer lays close to the surface thereby creating a perched water table (e.g., seasonal wetlands and vernal pools).

Hydrology field indicators were visually assessed within the survey area. Hydrologic indicators searched for included artificial and natural drainages, topographic basins, evidence of inundation, saturated soils, algal matting, surface soil cracks, and oxidized rhizospheres among living roots.

Field Mapping

The wetland delineation was conducted in accordance with the 1987 Corps of Engineers Wetland Delineation Manual and 2008 Regional Supplement. Potentially jurisdictional Waters of the U.S., including wetlands in the site were delineated on April 20, May 10, May 18, and June 2, 2022 by Diane Moore and Colleen Laskowski of Moore Biological Consultants.

The wetland boundaries were recorded in the field using a Trimble GeoXH Global Positioning System (GPS) unit. The GPS data were corrected using the nearest available base station. The data were then combined with a June 2021 aerial photograph in ArcGIS to create the wetland delineation map (Appendix A).

III. RESULTS

Environmental Setting

The project site is near the historic town of Latrobe in east El Dorado County, California. The site consists of relatively steep and rolling hills sloping generally to the southwest; site elevations range from approximately 600 to 900 feet above mean sea level. Cattle grazing, development, construction and use of farm roads

and fire breaks, and off-road vehicles have somewhat modified vegetation and topography within the project vicinity, including that within the site.

California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes the dominant upland habitat type in the site. Soft brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), oats (*Avena sp.*), wall barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are the most prevalent upland grass species in the site. Other grasslands species such as black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus*), rose clover (*Trifolium hirtum*), and filaree (*Erodium botrys*) are intermixed with the grasses (Table 1).

The aquatic features in the site contain a relatively similar composition of hydrophytic plant species including seaside barley (*Hordeum marinum*), annual rabbit-foot's grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), common spikerush (*Eleocharis palustris*) and a few other common species.

The U.S. Department of Agriculture El Dorado County Soil Survey (USDA, 1974) was reviewed for information about soil types in the site (Figure 3). Soils in the project site include Argonaut gravelly loam, 2 to 15 percent slopes (Map Unit AkC), Argonaut very rocky loam3 to 30 percent slopes (Map Unit AmD), Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD), Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) and Perkins gravelly loam, moderately deep variant, 2 to 5 percent slopes (Map Unit PgB).

While of the soils in the site are considered "hydric soils" (USDA NRCS, 2012), the Argonaut gravelly loam, 2 to 15 percent slopes and Argonaut very rocky loam3 to 30 percent slopes soil types contain minor inclusions of hydric soils. All of the soils are classified as "well drained", with the exception of Perkins gravelly loam, moderately deep variant, 2 to 5 percent slopes (Map Unit PgB), which is considered "moderately well drained".

Table 1

Plant List

Scientific Name	Common Name	Indicator Status[1]
Acmispon americanus	Spanish lotus	UPL
Aira caryophyllea	common silver-hair grass	FACU
Alisma trivale	northern water plantain	
Avena fatua	oat	NL
Brassica nigra	black mustard	NL
Brodiaea elegans	elegant clusterlily	FACU
Bromus diandrus	ripgut brome	NL
Bromus hordeaceus	soft brome	FACU
Calochortus luteus	yellow mariposa lily	NL
Carduus pycnocephalus	Italian thistle	NL
Cyperus eragrostis	tall flat sedge	FACW
Delphinium nuttallianum	Nuttall's larkspur	FAC
Deschampsia danthonioides	annual hair grass	FACW
Eleocharis palustris	common spikerush	OBL
Erodium botrys	long-beak stork's bill	FACU
Erodium cicutarium	common stork's bill	NL
Hordeum marinum	seaside barley	FAC
Hordeum murinum	wall barley	FACU
Juncus balticus	Baltic rush	FACW
Juncus bufonius	toad rush	FACW
Juncus effusus	lamp rush	FACW
Leontodon saxatilis	lesser hawkbit	FACU
Lolium perenne	perennial ryegrass	FAC
Lythrum hyssopifolium	Hyssop loosestrife	OBL
Mimulus guttatus	seep monkeyflower	OBL
Paspalum dilatatum	golden hairgrass	FAC
Plagiobothrys nothofulvus	rusty popcornflower	FAC
Polypogon monspeliensis	annual rabbit's foot grass	FACW
Quercus lobata	valley oak	FACU

Table 1

Plant List (continued)

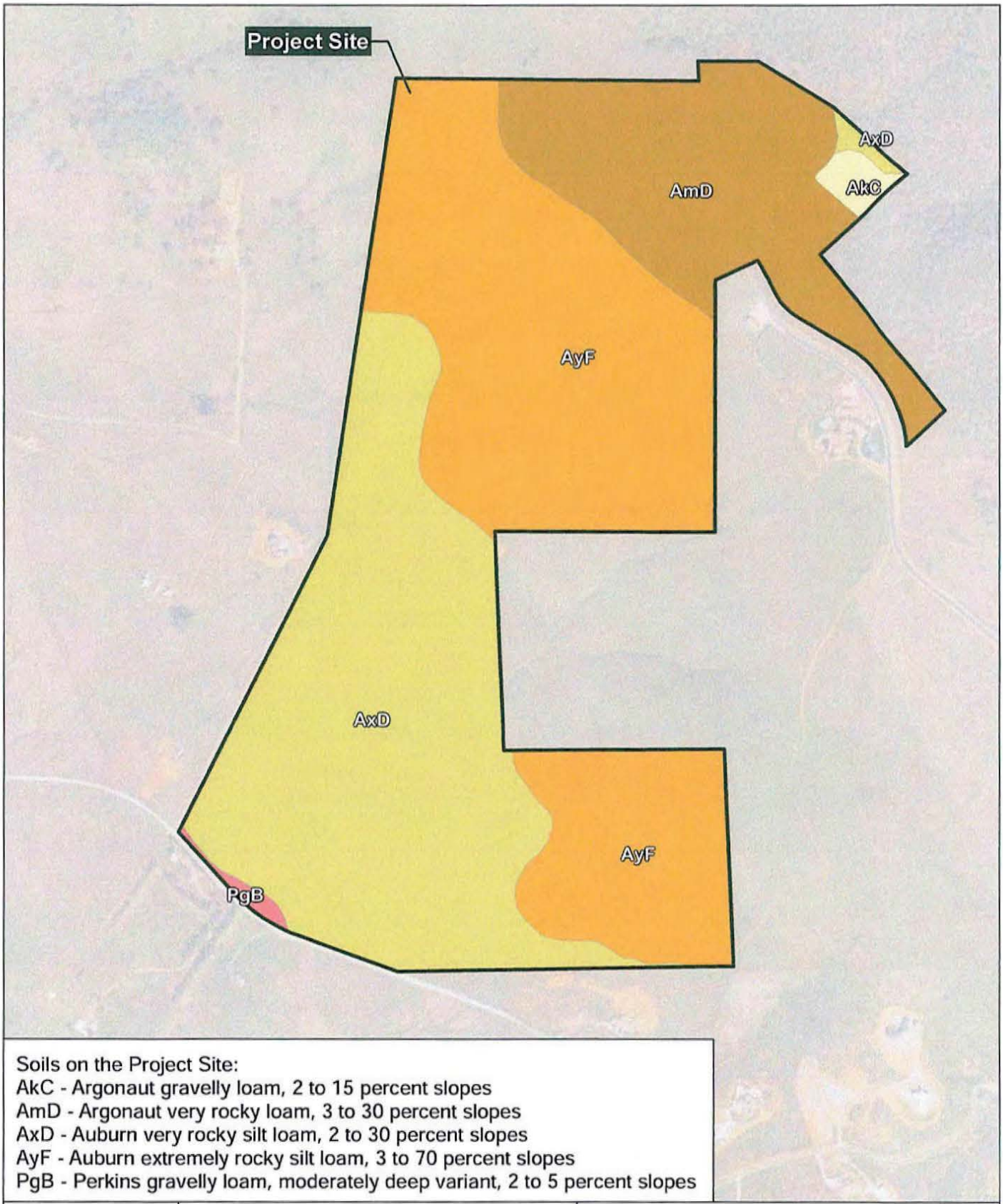
Scientific Name	Common Name	Indicator Status[1]
Rumex crispus	curly dock	FAC
Salix gooddingii	Goodding's black willow	FACW
Taeniatherum caput-medusae	medusa-head grass	NL
Trifolium hirtum	rose clover	NL
Triteleia hyacinthina	white brodiaea	FAC
Typha latifolia	broadleaf cattail	OBL
Zeltnera muehlenbergii	Muhlenberg's centaury	FAC

1 OBL = obligate wetlands species that occur in wetlands 99 percent of the time; FACW = facultative wetlands plants that occur in wetlands 67 to 99 percent of the time; FAC = facultative plants that are equally likely to occur in wetlands or uplands; FACU = facultative upland plants that occur in uplands 67 to 99 percent of the time; NI = species with no indicator status due to insufficient information; UPL = occurs in uplands 99% percent of the time; NL = upland species not included in the *National Wetland Plant List: Arid West 2020 Final Regional Plant List* (ACOE, 2020).

Potential Waters of the U.S. and Wetlands

A total of 2.88 acres of potential Waters of the U.S., including wetlands was delineated in the 294+/- acre site (see Aquatic Resources Map in Appendix A). Field data sheets for representative 3-parameter wetland and upland data points are included in Appendix B. Photographs of representative wetlands and uplands in the site are included in Appendix C. The National Wetland Inventory Map of the area is included in Appendix D.

INTERMITTENT CREEKS: There are six intermittent creeks in the site that encompass a total of 1.32 acres and are labeled "IC-1 through IC-6" on the Aquatic Resources Map (Appendix A). Intermittent Creeks IC-1, IC-2, and IC-3 are located in the central part of the site and flow generally east to west.



Soils on the Project Site:
AkC - Argonaut gravelly loam, 2 to 15 percent slopes
AmD - Argonaut very rocky loam, 3 to 30 percent slopes
AxD - Auburn very rocky silt loam, 2 to 30 percent slopes
AyF - Auburn extremely rocky silt loam, 3 to 70 percent slopes
PgB - Perkins gravelly loam, moderately deep variant, 2 to 5 percent slopes

Figure 3

Moore Biological Consultants

0 500 1,000

N W E S

SOILS

Victoria Way

El Dorado County, CA

Data Source: Natural Resources Conservation Service
Map Date: 06/07/2022

Aerial Source: Maxar (02/2021)

Intermittent Creeks IC-4, IC-5, and IC-6 are located in the south part of the site and flow generally north to south. Intermittent Creek IC-4 exits the site via a culvert under Settlers Trail. The intermittent creeks appear to primarily convey water during and following rain events. However, several of the intermittent creeks are also supported by underground seeps that trickle at least minor quantities of water in to portions of the creeks on a nearly year-round basis during most years.

The intermittent creeks in the site vary in size, but all contain well-defined beds and banks with bedrock and rocky substrates along portions of many of the channels (see photographs in Attachment C). There are cobbles and gravels in some areas. Sections of some of the intermittent creeks are relatively low gradient and resemble seasonal wetland swales, with boggy soils and seasonal wetland vegetation. Annual rabbit's-foot grass (*Polypogon monspeliensis*), seaside barley (*Hordeum marinum*), toad rush (*Juncus bufonius*), and curly dock (*Rumex crispus*) are the dominant hydrophytes in the intermittent creeks.

Intermittent Creeks IC-1 and IC-3 are depicted as "blue-line streams" on the USGS topographic map (Figure 2) and both are also depicted as combination "Riverine" and "Freshwater Emergent Wetland" features on the National Wetland Inventory (NWI) map (Appendix D). Intermittent Creek IC-5 is the only other intermittent creek in the site on the NWI map, and is depicted as a Freshwater Emergent Wetland feature.

EPHEMERAL CREEKS: There are eight ephemeral creeks in the site that encompass 0.20 acres and area labeled "EC-1 through EC-8" on the Aquatic Resources Map (Appendix A). Most of these creeks are relatively short and flow into the intermittent creeks, with the exception of Ephemeral Creeks EC-1 and EC-8, which flow directly off the site. Ephemeral Creek EC-1 is located in the oak woodlands in the northeast part of the site and drains to the northeast and Ephemeral Creek EC-8 is located in the southeast part of the site and drains to

the south. The remaining ephemeral creeks are associated with the intermittent creeks in the central and south parts of the site.

The ephemeral creeks carry water only during and very shortly after rain events, and are dry the remainder of the time. The ephemeral creeks lack seep and spring input and are comparatively less saturated than the intermittent creeks. The ephemeral creeks also have relatively small watersheds. The ephemeral creeks have well-defined beds and banks, with bedrock and rocky substrates along portions of many of the channels, and cobbles and gravels in some areas. The beds of some sections of the ephemeral creeks are vegetated with hydrophytic species as well as some upland grasses and weeds.

Although not mapped as "blue-line stream" features on the USGS topographic map (Figure 2), Ephemeral Creeks EC-2, EC-3, and EC-4 and EC-5, are tributary to intermittent streams that are depicted as "blue-line streams". None of the ephemeral creeks are depicted as aquatic features in the NWI (Appendix D).

SEEPS: There are a total of twelve seeps in the site that encompass 1.20 acres and are labeled "Seep-1" through "Seep-12" on the Aquatic Resources Map (Appendix A). Many of the seeps are situated upstream or adjacent to one of the intermittent creeks in the site and drain in to the creek. The remaining seeps are spatially and hydrologically isolated from the creeks and are entirely surrounded by uplands.

The larger and most developed seeps in the site appear to trickle water much of the year, with some actively flowing during the field surveys. The seeps in the site are vegetated with much of the same hydrophytes found throughout the aquatic features in the site, and also contain species such as common spikerush (*Eleocharis palustris*), annual rabbit's foot grass, Baltic rush (*Juncus balticus*), and tall flat sedge (*Cyperus eragrostis*).

Seep-3 and Seep-5 and their associated "blue-line streams", Intermittent Creeks IC-1 and IC-2, respectively, are depicted on the USGS topographic map (Figure 2). Seep-8 is the only seep in the site on the NWI map, where it is depicted as a "Freshwater Emergent Wetland" (Appendix D).

STOCK POND: There is a 0.17-acre stock pond in the south part of the site is that is labeled "Stock Pond SP-1" on the Aquatic Resources Map (Appendix A). This pond appears to have been a natural seep that was excavated and made larger, likely to support cattle watering in the site. There is a man-made dam on the south edge of the pond and elevated berms surrounding the pond. Intermittent Creek IC-5 flows in to the stock pond and the water leaves the pond either via a constructed outlet channel, or by seeping under the dam.

Stock Pond SP-1 supports a large patch of broadleaf cattails (*Typha latifolia*) with other hydrophytic vegetation including common spikerush, northern water plantain (*Alisma trivale*) and a few small willows (*Salix gooddingii*). Several red-winged blackbirds were observed nesting in vegetation in the pond during the field surveys and it appears very productive biologically, supporting American bullfrog and Pacific chorus frog. The pond contained water during all of the field surveys and likely holds at least some water year-round.

Stock Pond SP-1 is depicted on the USGS topographic map (Figure 2) and as a "Freshwater Emergent Wetland" on the NWI map (Appendix D).

HYDROLOGIC PATTERNS AND JURISDICTIONAL BASIS: Under regulations in place as of August 2022, most of the mapped aquatic resources are believed to fall under the jurisdiction of the ACOE. Ephemeral Creek EC-1 flows northeast in to Latrobe Creek, which in turn flows in to Deer Creek. The remaining creeks drain off-site to the west and south into a complex network of small creeks and unnamed tributaries in the project vicinity that either drain in to Deer Creek generally west of the site or in to the Cosumnes River generally south of the site. Deer Creek flows in to the Cosumnes River many miles southwest of the site.

The Cosumnes River is a jurisdictional water of the U. S. and the tributary relationship of the on-site creeks to the Cosumnes River forms the basis for them being potentially jurisdictional Waters of the U.S. and under the jurisdiction of agencies including ACOE and the RWQCB.

The seeps that are hydrologically connected to one of the creeks in the site are also believed to be regulated by ACOE as "Adjacent Wetlands". In contrast, Seep-1, Seep-2, Seep-4, Seep-6 and Seep-9 are isolated features that are not adjacent to or hydrologically connected to one of the creeks in the site are believed to be outside ACOE jurisdiction.

IV. CONCLUSIONS

- A total of 2.88 acres of potentially jurisdictional Waters of the U.S., including wetlands, were delineated in the site. These aquatic features include 1.32 acres of intermittent creeks, 0.20 acres of ephemeral creeks, 1.20 acres of seeps, and a 0.17-acre stock pond.

- The majority of the aquatic features are believed to fall under the jurisdiction of the ACOE due to their tributary relationship to the Cosumnes River.

- Seep-1, Seep-2, Seep-4, Seep-6 and Seep-9 are isolated features and are believed to be outside ACOE jurisdiction.

- This delineation should be viewed as preliminary until it is verified by ACOE.

- Beyond the aquatic features described above, the remainder of the site is uplands, consisting of rolling hills vegetated in upland annual grasslands and oak woodlands.

V. REFERENCES

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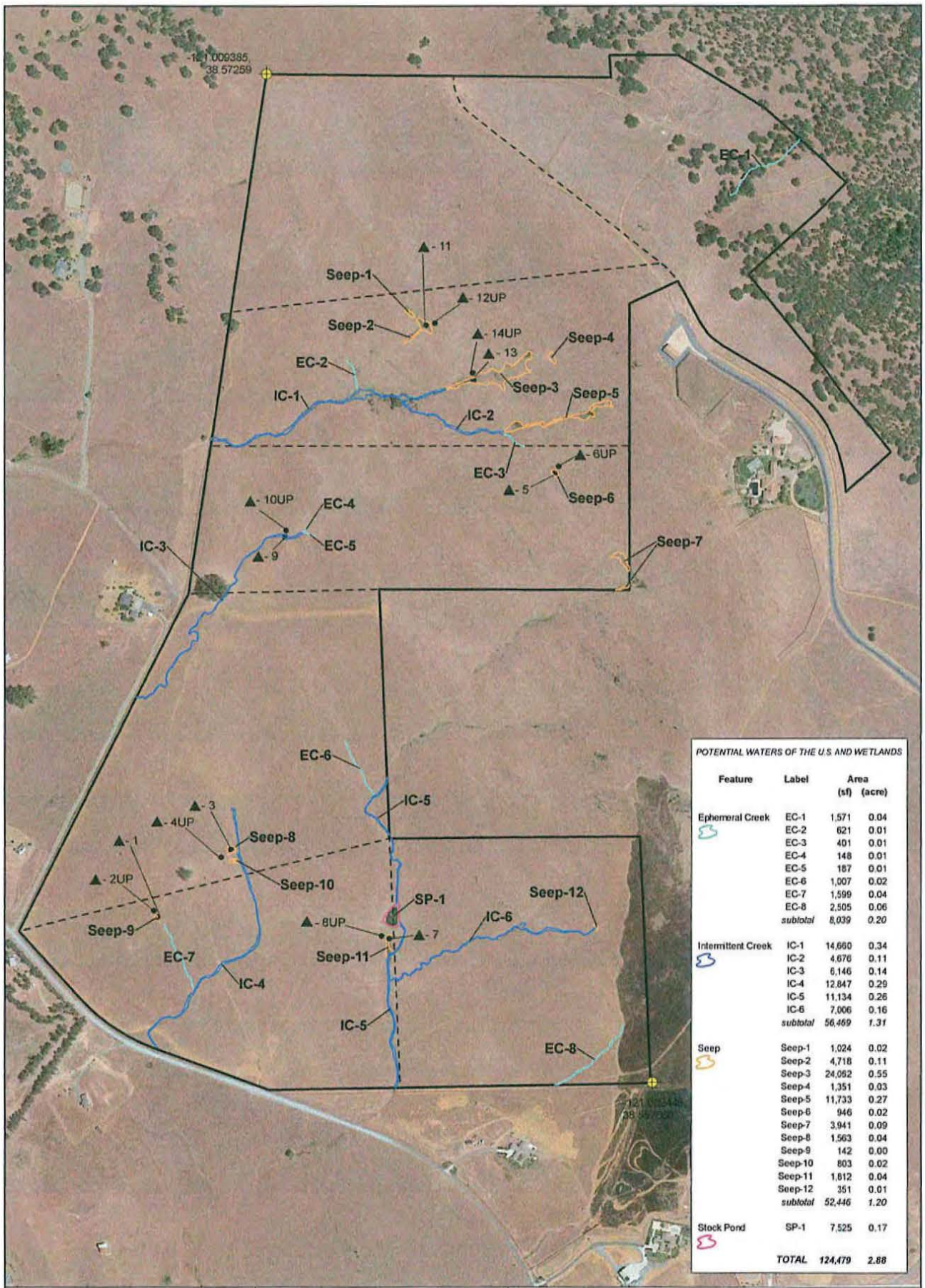
Appendix A

Aquatic Resources Delineation Map



POTENTIAL WATERS OF THE U.S. AND WETLANDS

Feature	Label	Area (sf)	Area (acre)
Ephemeral Creek	EC-1	1,571	0.04
	EC-2	621	0.01
	EC-3	401	0.01
	EC-4	148	0.01
	EC-5	187	0.01
	EC-6	1,007	0.02
	EC-7	1,599	0.04
	EC-8	2,505	0.06
	subtotal	*8,039*	*0.20*
Intermittent Creek	IC-1	14,660	0.34
	IC-2	4,676	0.11
	IC-3	6,146	0.14
	IC-4	12,847	0.29
	IC-5	11,134	0.26
	IC-6	7,006	0.16
	subtotal	*56,469*	*1.31*
Seep	Seep-1	1,024	0.02
	Seep-2	4,718	0.11
	Seep-3	24,052	0.55
	Seep-4	1,351	0.03
	Seep-5	11,733	0.27
	Seep-6	946	0.02
	Seep-7	3,941	0.09
	Seep-8	1,563	0.04
	Seep-9	142	0.00
	Seep-10	803	0.02
	Seep-11	1,812	0.04
	Seep-12	351	0.01
	subtotal	*52,446*	*1.20*
Stock Pond	SP-1	7,525	0.17
	TOTAL	*124,479*	*2.88*

Data Disclaimer:
The delineation has been done in accordance with the 1987 Wetlands Delineation Manual, US Army Corps of Engineers and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.

Aerial Source: Google Earth (06/2021)

Moore Biological Consultants

Study Area (±294 acres)

▲- 1 3-Parameter Data Point

0 250 500

N

Aquatic Resources Map

Victoria Way

El Dorado County, CA

Map Date: 08/03/2022

Appendix B

3-parameter Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 5/18/2022

Applicant/Owner: Alder Mountain Millworks, Inc. State: CA Sampling Point: 1

Investigator(s): Diane Moore Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5%

Subregion (LRR): C = Mediterranean California Lat: 38.5603639° Long: -121.0116190° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-1". This data point is within Seep-9, which is an isolated seep situated just upslope of Ephemeral Creek EC-7.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Lythrum hyssopifolium	30%	yes	OBL
2. Hordeum marinum	20%	yes	FAC
3. Eleocharis palustris	20%	yes	OBL
4. Juncus bufonius	10%	no	FACW
5. Polypogon monspeliensis	10%	no	FACW
6.			
7.			
8.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

Heavily grazed.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6"	7.5YR 3/4	100%						
6-12"	5YR 4/1	95%	7.5YR 3/4	5%	C	PL&M	clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Heavy clay. Soil is very moist and gray in color. Cattle hoofprints.

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**)
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Small, isolated basin with spring/seep influence, appears to pond water to a depth of 8 inches deep.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 5/19/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 2UP

Investigator(s): Diane Moore Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5%

Subregion (LRR): C = Mediterranean California Lat: 38.5603723° Long: -121.0116468° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-2UP". This data point is in the grasslands adjacent to Seep-9.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	30%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Taeniatherum caput-medusae	20%	yes	NL
4. Deschampsia danthonioides	10%	no	FACU
5.			
6.			
7.			
8.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 10% % 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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:

The grasslands in the southwest part of the site are heavily grazed.

SOIL

Sampling Point: 2UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
4-12"	7.5YR 4/6	100%					loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright reddish brown and appears well-draining.

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)**
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Gently sloping hill - no indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 5/18/2022

Applicant/Owner: Alder Mountain Millworks, Inc State: CA Sampling Point: 3

Investigator(s): Diane Moore Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 8%

Subregion (LRR): C = Mediterranean California Lat: 38.5612702° Long: -121.0102548° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: Freshwater Emergent Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-3". This data point is within Seep-8, located adjacent and hydrologically connected to Intermittent Creek IC-4.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Lythrum hyssopifolium	30%	yes	OBL
2. Eleocharis palustris	30%	yes	OBL
3. Hordeum marinum	20%	yes	FAC
4. Juncus bufonius	20%	yes	FACW
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

Heavily grazed.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	7.5YR 3/4	100%						
4-12"	5YR 4/1	90%	7.5YR 4/6	10%	C	PL&M	clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Soil deeper than 4 inches is very gray and moist; change from surface layer to deeper layer is abrupt.

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)**
- ✓ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Spring/seep on side of hill adjacent to ephemeral creek and adjacent to a more developed and isolated seep.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 5/18/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 4UP

Investigator(s): Diane Moore Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 8%

Subregion (LRR): C = Mediterranean California Lat: 38.5612606° Long: -121.0102778° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP 4-UP". This data point is in the grasslands adjacent to Seep-8.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	30%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Taeniatherum caput-medusae	20%	yes	NL
4. Juncus bufonius	20%	no	FACW
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[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:

Heavily grazed typical upland grassland vegetation found throughout most of the site.

SOIL

Sampling Point: 4UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12"	7.5YR 4/6	100%					loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ 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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright reddish brown and appears well-draining. Soil crumbly and very dry.

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**)
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Gently sloping hill - no indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way | City/County: El Dorado County | Sampling Date: 5/18/2022

Applicant/Owner: Alder Mountain Millworks, Inc. | State: CA | Sampling Point: 5

Investigator(s): Diane Moore | Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none - flat | Slope (%): 20%

Subregion (LRR): C = Mediterranean California | Lat: 38.5667396° | Long: -121.0041226° | Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70% slopes (Map Unit AyF) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-5". This data point is within Seep-6, which is an isolated seep high on a hillside. There are several seeps at approximately the same elevation across the hill.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Lolium perenne	40%	yes	FAC
2. Polypogon monspeliensis	20%	yes	FACW
3. Juncus bufonius	20%	yes	FACW
4. Rumex crispus	10%	no	FAC
5. Juncus balticus	10%	no	FACW
6. Juncus effusus	+	no	FACW
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0 | % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

Heavily grazed.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
4-10"	10YR 4/2	95%	10YR 3/4	5%	C	PL&M	clay loam	mostly clay

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Soil is moist at the surface.

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)**
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water seeping weakly out of the side of hill supports this small, marginal, and seepy wetland.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 5/18/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 6UP

Investigator(s): Diane Moore Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 20%

Subregion (LRR): C = Mediterranean California Lat: 38.5667914° Long: -121.0040932° Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-6UP". This data point is in the grasslands adjacent to Seep-6.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Erodium botrys	30%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Taeniatherum caput-medusae	20%	yes	NL
4. Bromus hordeaceus	20%	yes	FACU
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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:

Typical upland grassland found throughout most of the site.

SOIL

Sampling Point: 6UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
4-10"	7.5YR 4/6	100%						

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright reddish brown and appears well-draining. Soil crumbly and very dry.

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)**
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Side of a steep hill - no indicators of wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks, Inc State: CA Sampling Point: 7

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5%

Subregion (LRR): C = Mediterranean California Lat: 38.5600155° Long: -121.0073138° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: Freshwater Emergent Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-7". This data point is within Seep-11, which is located in the historical creek bed downstream of Stock Pond SP-1.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Cyperus eragrostis	20%	yes	FACW
2. Polypogon monspeliensis	20%	yes	FACW
3. Juncus bufonius	20%	yes	FACW
4. Eleocharis palustris	20%	yes	OBL
5. Leontodon saxatilis	10%	no	NL
6. Lolium perenne	10%	no	FAC
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

Hordeum marinum, Mimulus gluttatus, and Trifolium variegatum also present.

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-12"	2.5YR 4/1	70%	7.5YR 5/8	30%	C	PL&M	clay loam	heavy clay

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Seep is muddy and trampled by cattle.

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**)
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

This wetland appears to be supported by water seeping from the ground just downstream of the stock pond dam; the dam may also be leaking. Under heavy flow conditions, the majority of water flowing out of the pond leaves via a constructed channel further east.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way | City/County: El Dorado County | Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks | State: CA | Sampling Point: 8UP

Investigator(s): Diane Moore, Colleen Laskowski | Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 5%

Subregion (LRR): C = Mediterranean California | Lat: 38.5600194° | Long: -121.0073311° | Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-8UP". This data point is in the grasslands adjacent to the historical creek bed downstream of Stock Pond SP-1.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	30%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Erodium botrys	20%	yes	FACU
4. Avena fatua	10%	no	NL
5.			
6.			
7.			
8.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 10% | % 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[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:

Typical upland grassland found throughout most of the site. Heavily grazed.

SOIL

Sampling Point: SUP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-12"	7.5YR 4/4	100%					loam	crumbly

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil crumbly and very dry.

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**)
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Gently sloping hill - appears well draining.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks, Inc. State: CA Sampling Point: 9

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5%

Subregion (LRR): C = Mediterranean California Lat: 38.5658721° Long: -121.0091462° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-9". This data point is within a broad seepy area along Intermittent Creek IC-3 that with attributes of a wetland swale. There is a defined channel with bed and bank upstream and downstream of the seepy area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Polypogon monspeliensis	40%	yes	FACW
2. Cyperus eragrostis	20%	yes	FACW
3. Lolium perenne	20%	yes	FAC
4. Juncus bufonius	10%	no	FACW
5. Rumex crispus	10%	no	FAC
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

Heavily grazed grassland.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-12"	2.5YR 4/1	90%	7.5YR 4/6	10%	C	PL&M	clay loam	heavy clay

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Soil is moist at the surface; cattle hoof prints.

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)**
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water provided by seep/spring action along this portion of the channel.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 10UP

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 5%

Subregion (LRR): C = Mediterranean California Lat: 38.5658953° Long: -121.0091196° Datum: NAD 1983

Soil Map Unit Name: Auburn very rocky silt loam, 2 to 30 percent slopes (Map Unit AxD) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-10UP" This data point is in the grasslands adjacent to Intermittent Creek IC-3

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	30%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Acmispon americanus	20%	yes	UPL
4. Avena fatua	20%	yes	NL
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[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:

Typical upland grassland found throughout most of the site. Heavily grazed.

SOIL

Sampling Point: 10UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-12"	7.5YR 4/6	100%					loam	crumbly

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright brown, dry and crumbly.

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**)
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Side of hill sloping down toward the adjacent swale.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way | City/County: El Dorado County | Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks, Inc. | State: CA | Sampling Point: 11

Investigator(s): Diane Moore, Colleen Laskowski | Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): concave | Slope (%): 20%

Subregion (LRR): C = Mediterranean California | Lat: 38.5688803° | Long: -121.0065635° | Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) | NWI classification: Freshwater Emergent Wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-11". This data point is within Seep-2. This seep appears to have been excavated in the past and made larger, likely related to cattle watering.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Paspalum dilatatum	30%	yes	FAC
2. Juncus effusus	30%	yes	FACW
3. Lolium perenne	10%	no	FAC
4. Polypogon monspeliensis	10%	no	FACW
5. Cyperus eragrostis	10%	no	FACW
6. Typha latifolia	+	no	OBL
7.			
8.			
	90% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 10% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10-12"	5YR 4/2	100%					clay loam	heavy clay

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Dark fully saturated soil with no apparent redoximorphic features.

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)**
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Very moist seep that appears to be saturated year-round; standing water at the top end of the seep.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 12UP

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 20%

Subregion (LRR): C = Mediterranean California Lat: 38.5689267° Long: -121.0063865° Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-12UP". This data point is approximately 2+/- feet from the abrupt wetland edge of Seep-2.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	20%	yes	FACU
2. Leontodon saxatilis	20%	yes	UPL
3. Taeniatherum caput-medusae	20%	yes	NL
4. Erodium botrys	20%	yes	FACU
5. Carduus pycnocephalus	10%	no	NL
6. Zeltnera muehlenbergii	10%	no	NL
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[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:

Typical upland grassland found throughout most of the site. Heavily grazed.

SOIL

Sampling Point: 12UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
10-12"	7.5YR 4/4	100%					loam	crumbly, dry

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright brown and appears well-draining.

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)**
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Steep hillside just upslope of Seep-2.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks, Inc. State: CA Sampling Point: 13

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 20%

Subregion (LRR): C = Mediterranean California Lat: 38.5681077° Long: -121.0056075° Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP-13". This data point is near the top of a defined slot in Seep-3.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Polypogon monspeliensis	30%	yes	FACW
2. Cyperus eragrostis	20%	yes	FACW
3. Juncus bufonius	20%	yes	FACW
4. Juncus effusus	20%	yes	FACW
5. Lythrum hyssopifolium	10%	no	OBL
6. Rumex crispus	+	no	FAC
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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 X No ____

Remarks:

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-10"	10YR 4/2	90%	7.5YR 4/6	10%	C	PL&M		loamy clay

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Soils is dry at 10" deep.

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**)
- ___ 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): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Large seepy area on a steep hillside that drains in to an intermittent creek.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Way City/County: El Dorado County Sampling Date: 6/02/2022

Applicant/Owner: Alder Mountain Millworks State: CA Sampling Point: 14UP

Investigator(s): Diane Moore, Colleen Laskowski Section, Township, Range: Section 8, Township 8 North, Range 8 East (Folsom SE)

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 20%

Subregion (LRR): C = Mediterranean California Lat: 38.5681798° Long: -121.0056233° Datum: NAD 1983

Soil Map Unit Name: Auburn extremely rocky silt loam, 3 to 70 percent slopes (Map Unit AyF) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation no, Soil no, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation no, Soil no, or Hydrology no naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

This is the 3rd year of drought. Latitude/longitude is at the approximate location of data point "DP 14-UP". This data point is on a hillslope adjacent to Seep-3.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 2 sq. meters)			
1. Bromus hordeaceus	40%	yes	FACU
2. Leontodon saxatilis	30%	yes	UPL
3. Taeniatherum caput-medusae	10%	no	NL
4. Erodium botrys	10%	no	FACU
5. Acmispon americanus	10%	no	UPL
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[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:

Typical upland grassland found throughout most of the site.

SOIL

Sampling Point: 14UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
6-10"	10YR 3/4	100%						

[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: Unknown

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Soil is bright brown and appears well-draining.

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)**
- ___ 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): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Very steep hillside.

Appendix C

Photographs

Intermittent Creek IC-1 near the west edge of the site, looking west; 04/20/22.

Intermittent Creek IC-2, looking northwest toward the confluence with Intermittent Creek IC-1; 04/20/22.

Intermittent Creek IC-9 upstream of Stock Pond SP-1, looking northwest; 05/10/22.

Ephemeral Creek EC-1, looking southwest; 04/20/22.

Seep-2 on a steep hillside in the north part of the site, looking southwest; 05/10/22.

Seep-2 a few weeks later than the above photograph, looking southwest from the lower part of the seep; 06/02/22.

Seep-10 in the west part of the site, looking southwest; 05/10/22. The small, depressional seep drains in to Intermittent Creek IC-4.

Stock Pond SP-1 in the southwest part of the site, looking southwest; 05/10/22. The pond holds water throughout the year and apeears to be supported by seeps.

Upland grassland in the southeast part of the site, looking west; 05/10/22. There are graded fire breaks along the edges of the site.

Oak woodlands in the southeast part of Lot A-8, looking northwest; 04/20/22.

Upland grassland on the ridgetop in the northeast part of the site, looking north; 4/20/22.

Upland grassland in the central part of the site, looking southeast; 04/20/22.

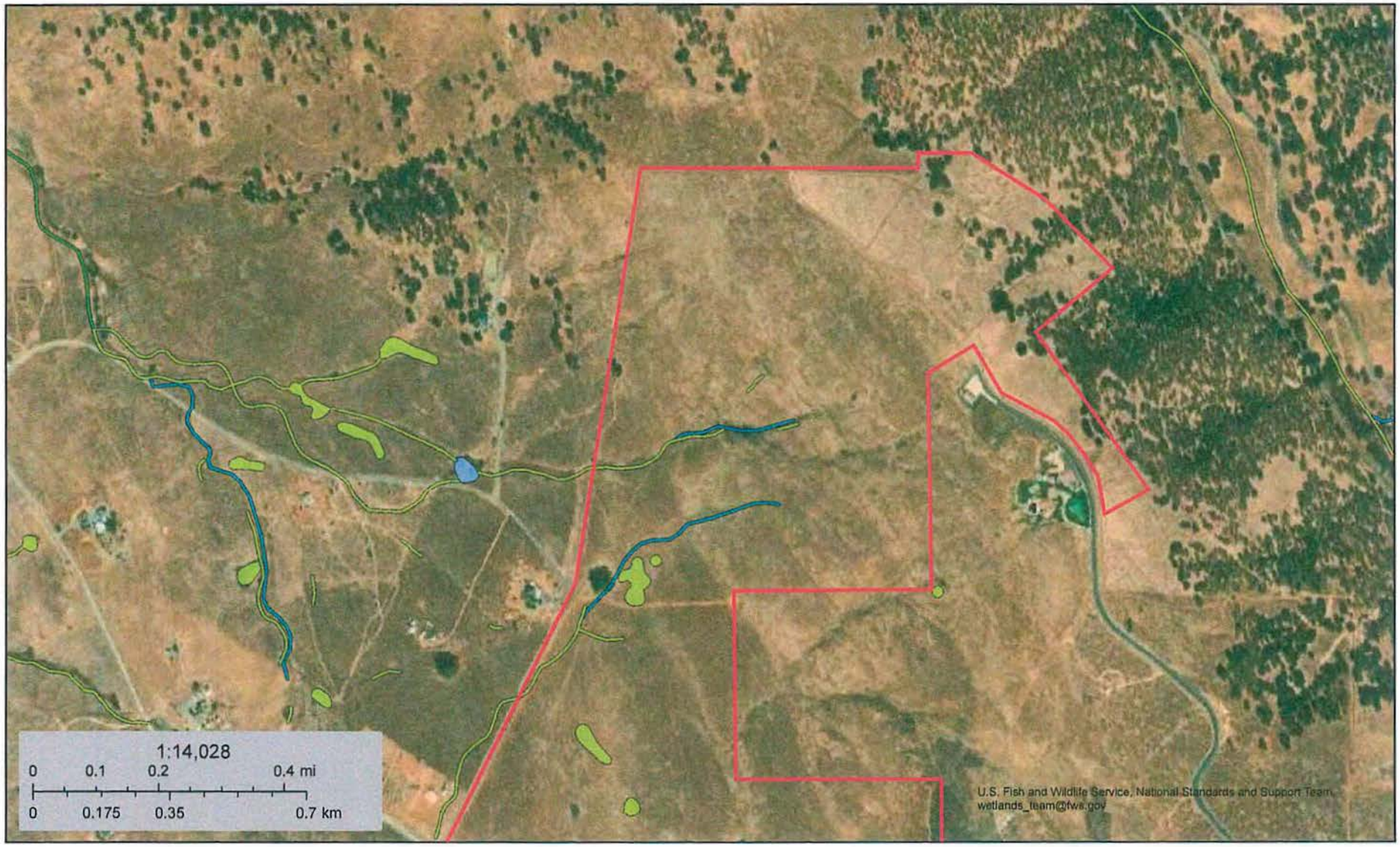
Appendix D

National Wetland Inventory Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Victoria Way (North)



August 2, 2022

Wetlands

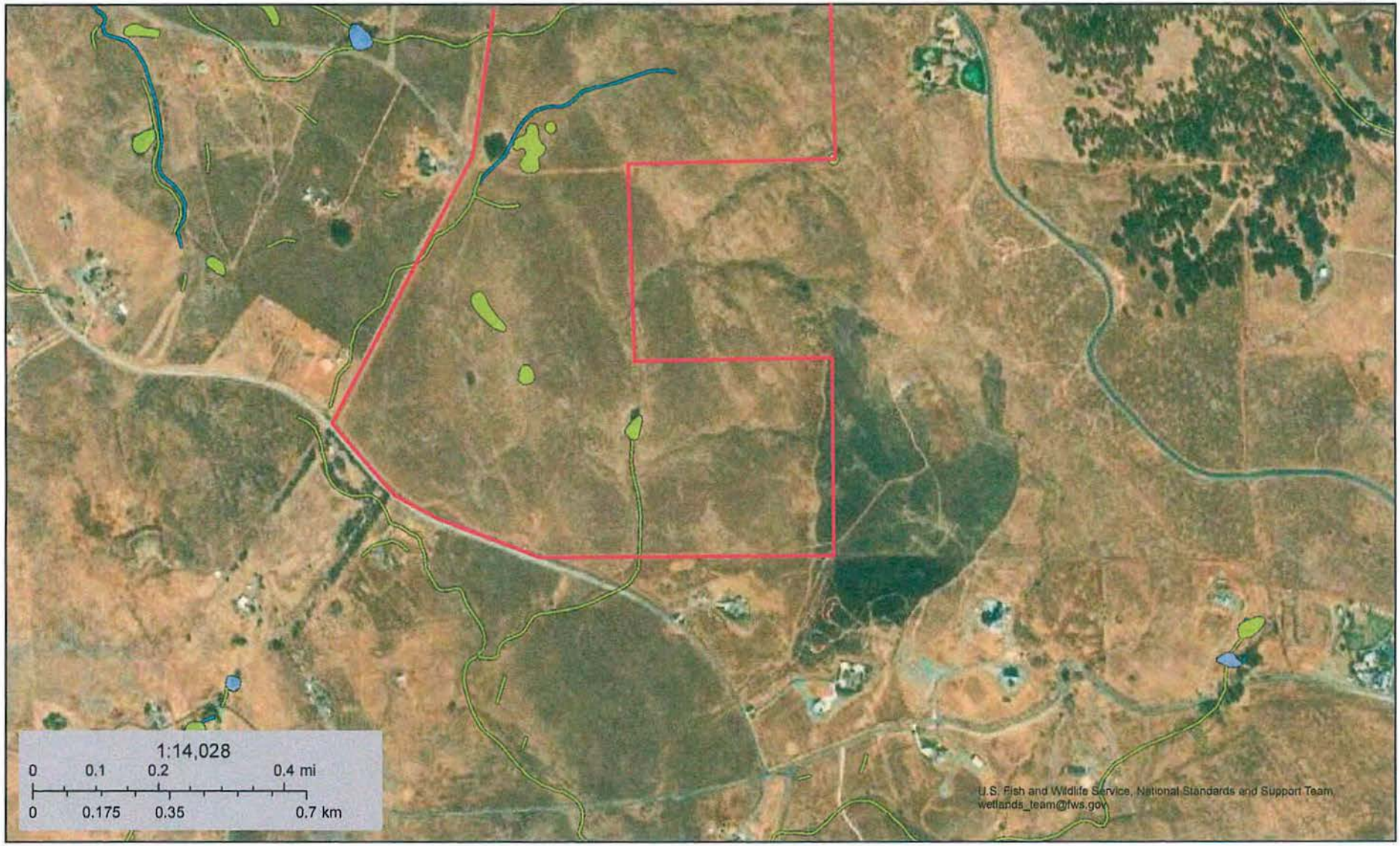
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service

National Wetlands Inventory

Victoria Way (South)

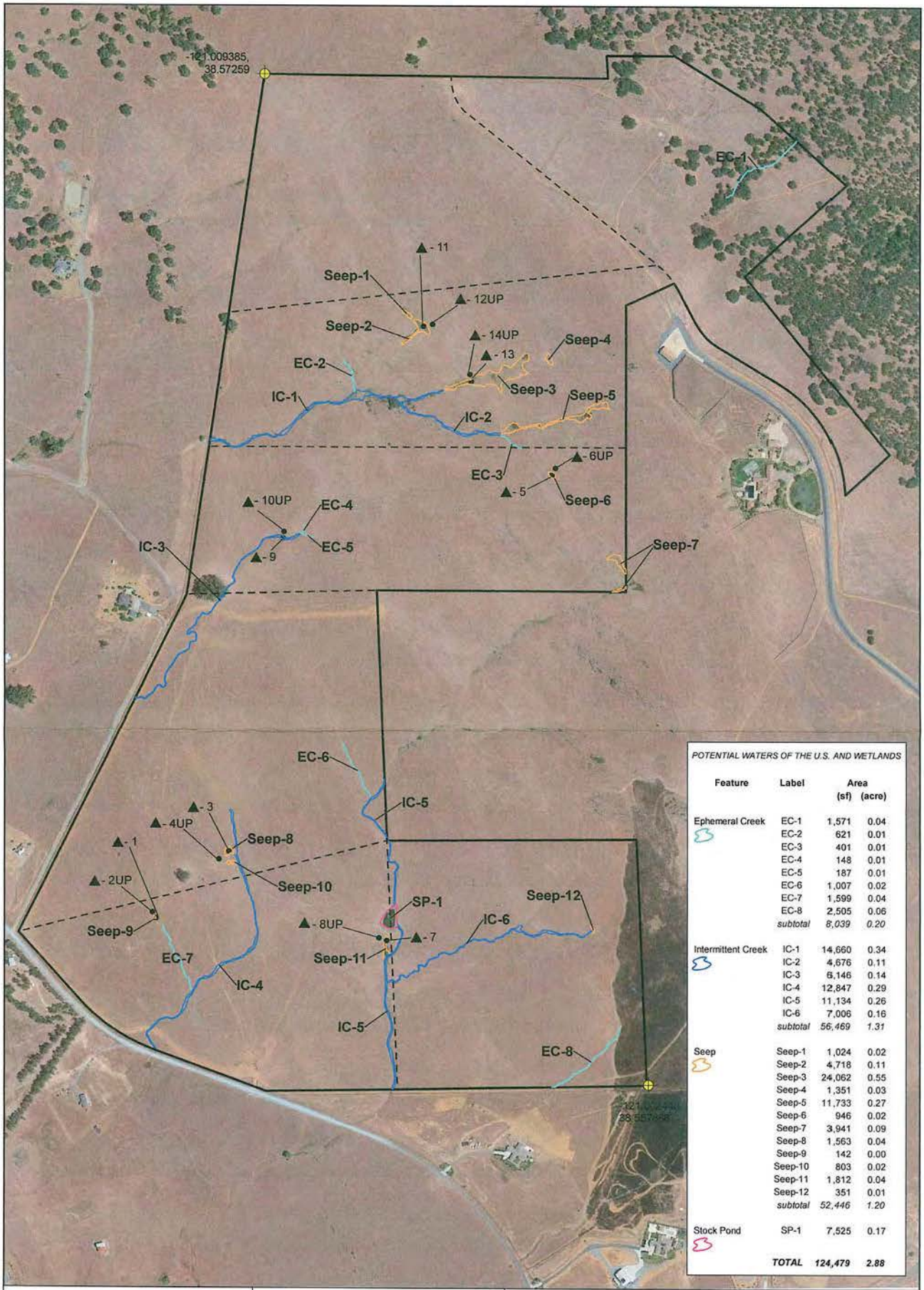


August 2, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



POTENTIAL WATERS OF THE U.S. AND WETLANDS

Feature	Label	Area (sf)	Area (acre)
Ephemeral Creek	EC-1	1,571	0.04
	EC-2	621	0.01
	EC-3	401	0.01
	EC-4	148	0.01
	EC-5	187	0.01
	EC-6	1,007	0.02
	EC-7	1,599	0.04
	EC-8	2,505	0.06
	subtotal	*8,039*	*0.20*
Intermittent Creek	IC-1	14,660	0.34
	IC-2	4,676	0.11
	IC-3	6,146	0.14
	IC-4	12,847	0.29
	IC-5	11,134	0.26
	IC-6	7,006	0.16
	subtotal	*56,469*	*1.31*
Seep	Seep-1	1,024	0.02
	Seep-2	4,718	0.11
	Seep-3	24,062	0.55
	Seep-4	1,351	0.03
	Seep-5	11,733	0.27
	Seep-6	946	0.02
	Seep-7	3,941	0.09
	Seep-8	1,563	0.04
	Seep-9	142	0.00
	Seep-10	803	0.02
	Seep-11	1,812	0.04
	Seep-12	351	0.01
	subtotal	*52,446*	*1.20*
Stock Pond	SP-1	7,525	0.17
	TOTAL	***124,479***	***2.88***

Data Disclaimer:
The delineation has been done in accordance with the 1987 Wetlands Delineation Manual, US Army Corps of Engineers and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.

Aerial Source: Google Earth (06/2021)

Moore Biological Consultants

Study Area (±294 acres)

▲- 1 3-Parameter Data Point

0 250 500

N

Aquatic Resources Map

Victoria Way

El Dorado County, CA

Map Date: 08/03/2022

APPENDIX D

WETLAND AND PERMIT REVIEW

MOORE BIOLOGICAL CONSULTANTS

March 17, 2025

Mr. Jeff Kovach
Bevier Structural Engineering
2479 Sunrise Blvd.
Gold River, CA 95670

SUBJECT: "RANCHO VICTORIA TENTATIVE MAP" (TM22-0004), EL DORADO COUNTY, CALIFORNIA: CLEAR-SPAN CREEK CROSSINGS WETLAND AND PERMIT REVIEW

Dear Jeff:

Thank you for asking Moore Biological Consultants to further assist with the Rancho Victoria Tentative Map project (Attachment A). As you are aware, we conducted an Aquatic Resources Delineation in 2022 in support of the proposed subdivision; a copy of the Aquatic Resources Delineation map is included in Attachment B. On January 11, 2024, El Dorado County requested an assessment of the potential impacts to aquatic resources from on-site and off-site road improvements (Attachment C). This letter describes how and why aquatic resources will not be impacted by the proposed road improvements.

First, in response to the County's first bullet point, the partial realignment, extension, and cul-de-sac of Victoria Way will not impact aquatic resources. The short section of proposed road and cul-de-sac align with an existing dirt road on top of a ridge. I drove my truck along this road and can confirm there are no aquatic resources in or near the proposed road extension and cul-de-sac.

In response to the County's third bullet point on potential widening of Settler's Trail, I understand it has been determined widening will not be needed as Settler's Trail is sufficiently wide.

To address the County's second bullet point, the applicant is opting to utilize clear-span crossings at the 3 locations where subdivision roads need to cross intermittent creeks (see plan and profile exhibits in Attachment D). The proposed crossings will

10330 Twin Cities Road, Suite 30 • P.O. Box 822 • Galt, CA 95632
(209) 745–1159 • *e-mail: moorebio@softcom.net*

entirely span the creeks, thereby eliminating the placement of "fill" that would trigger a permit from the U.S. Army Corps of Engineers and the associated Water Quality Certification from the Regional Water Quality Control Board. Clear-span crossings also do not involve the modification of the bed or bank of a stream, thereby negating the need for a Section 1602 Streambed Alteration Agreement from California Department of Fish and Wildlife.

To confirm the proposed culverts will sufficiently eliminate potential road impacts to aquatic resources, I conducted a field review of each crossing on January 10, 2025 (see photographs in Attachment E). Intermittent Creek IC-3 is approximately 4 feet wide at Crossing A, Intermittent Creek IC-1 is approximately 12 feet wide at Crossing B, and Intermittent Creek IC-5 is approximately 7 feet wide at Crossing B. The proposed clear-span culvert at Crossings A, B, and C are 12, 18, and 16 feet wide, respectively. These spans are sufficiently wide enough to achieve full avoidance of the bed, bank, and channel at each crossing.

To further ensure there will be no impacts to aquatic resources from construction of each crossing, installation of straw wattles and/or silt fencing along the upper creek banks (i.e., just downslope of each abutment) prior to construction is recommended. These erosion control measures will effectively prevent loose soil from rolling downslope in to the creeks during installation of the abutments. Following installation of each culvert, seeded disturbed areas near the creek with a native seed mix is also recommended.

We hope this letter addresses the County's concerns. Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

Attachment A

Tentative Map

TENTATIVE SUBDIVISION MAP
RANCHO VICTORIA

BEING A DIVISION OF PARCEL A PER PM 52-8
BEING A PORTION OF THE SW 1/4 SECTION 4, THE NE, SE AND SW 1/4 SECTION 8 AND THE NE, SW AND NW 1/4 SECTION 9, T. 8 N., R. 9 E., M. D. M.
COUNTY OF EL DORADO, STATE OF CALIFORNIA

Scale: 1" = 400' | TOMA & ASSOCIATES INC. ENGINEERING - SURVEYING - PLANNING 41 Summit Street, Jackson, CA 95642 (209) 223-0156 | January, 2024

GENERAL NOTES AND STATEMENTS

1.	RECORD OWNER:	KILLEEN 401 LLC, a Delaware Limited Liability Co. ATTN: STEFAN SOLOVIEV 4250 VICTORIA WAY SHINGLE SPRINGS, CA 95682 (530) 305-6708
	APPLICANT:	BEVIER STRUCTURAL ENGINEERING ATTN: JEFF KOVACH, PROJECT MGR 2479 SUNRISE BOULEVARD GOLD RIVER, CA 95670 (530) 305-6708
2.	PREPARED BY:	TOMA and ASSOCIATES LICENSED LAND SURVEYORS 41 SUMMIT STREET JACKSON, CA 95642 (209) 223-0156
3.	SCALE	1" = 400'
4.	CONTOUR INTERVAL:	2 FEET
5.	SOURCE OF TOPOGRAPHY:	TOPOGRAPHIC AERIAL SURVEY
6.	ASSESSOR'S PARCEL No:	087-010-043
7.	PRESENT ZONING:	RL-40
8.	GENERAL PLAN:	RR
9.	TOTAL AREA:	513.93 ACRES
10.	PROPOSED LOTS:	8 PARCELS RANGING FROM 40 ACRES TO 219.58± ACRES
11.	MINIMUM LOT SIZE:	MINIMUM LOT SIZE IS 40 ACRES.
12.	WATER:	INDIVIDUAL WELLS (1 EXISTING, 7 PROPOSED)
13.	SEWAGE DISPOSAL:	INDIVIDUAL SEPTIC SYSTEMS (1 EXISTING, 7 PROPOSED)
14.	FIRE PROTECTION:	EL DORADO HILLS FIRE DEPARTMENT
15.	FLOOD ZONE:	NO PORTION OF THIS PROJECT LIES WITHIN AN AREA SUBJECT TO FLOOD WATER INUNDATION BY THE 100-YEAR FLOOD AND IS WITHIN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP FOR EL DORADO COUNTY, CALIFORNIA DATED SEPTEMBER 26, 2008. PANELS 950 AND 975 OF 1125 MAP No.06017C0950E AND 06017C0975E
16.	FIRE HAZARD ZONE:	THIS PROJECT LIES WITHIN THE HIGH FIRE HAZARD SEVERITY ZONE IN STATE RESPONSIBILITY AREA AS SHOWN ON CALFIRE MAP FHSZ DATED 11-21-2022.

Scale: 1" = 400'
Contour Interval: 2'
0 400 800

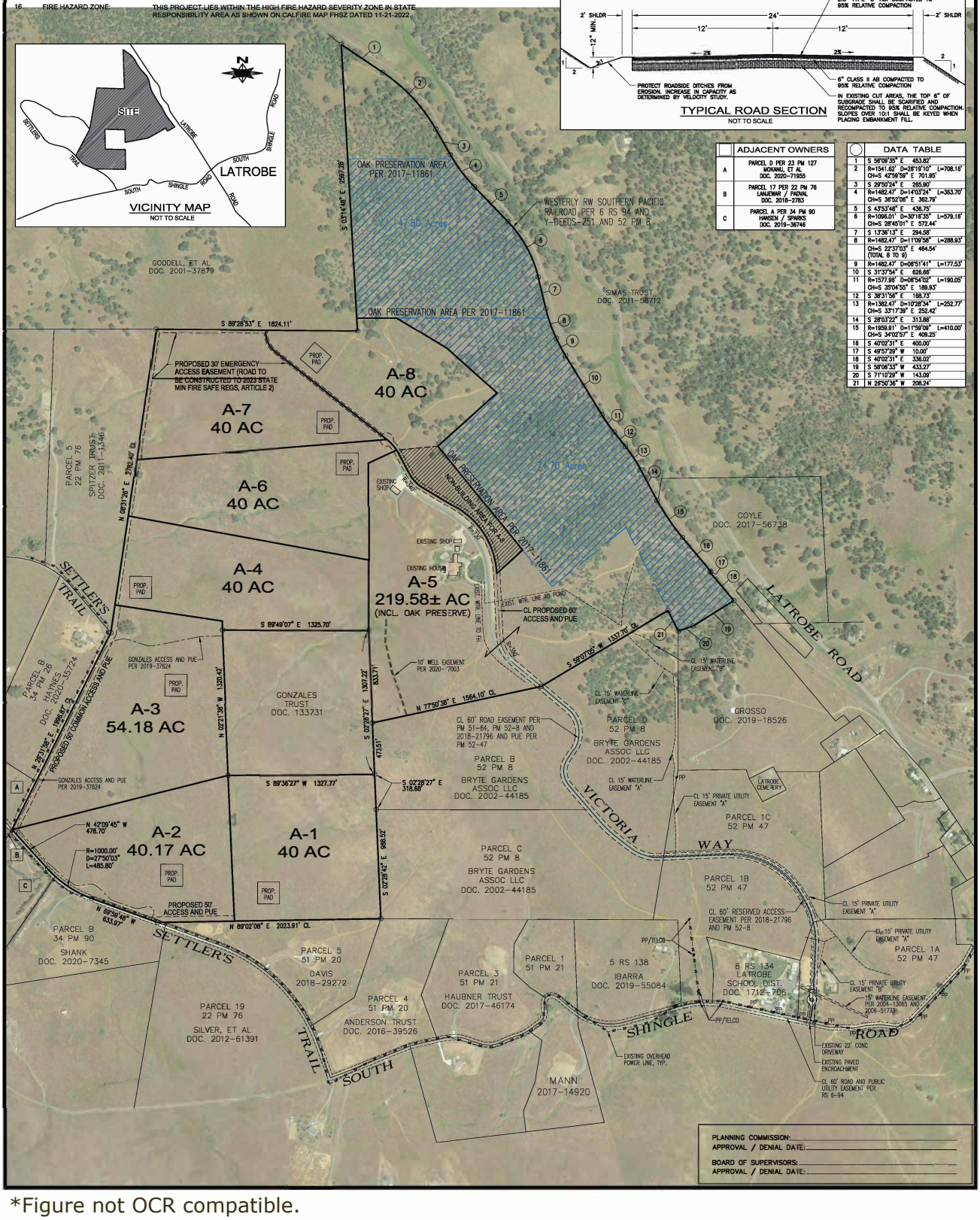
THE FOLLOWING EASEMENTS ARE NOTED IN PRELIMINARY REPORT TITLE No. 34-257141 PREPARED BY STEWART TITLE OF PLACER AND DATED OCTOBER 28, 2021 AS AFFECTING THIS PROPERTY (SEE SAID PRELIMINARY REPORT FOR COMPLETE LIST OF EXCEPTIONS):

Y-DEEDS-251	100' WIDE RAILROAD EASEMENT, CONDITIONS, INCIDENTALS, CENTRAL PACIFIC RR CO.
6-RS-94	EASEMENTS/NOTES SHOWN ON FINAL MAP
2004-13065	EASEMENT AGREEMENT, LATROBE SCHOOL DISTRICT
2006-51773	NOTICE OF RESTRICTION
NO DOCREF	RIGHTS TO POLE LINE OVER SOUTHERLY POR. PARCEL 10
51-PM-65	EASEMENTS/NOTES SHOWN ON FINAL MAP
2017-11861	OPTION AGREEMENT
2017-11862	OAK WOODLAND HABITAT PRESERVATION, DECL. OF ANNEXATION RECORDED 2020-43393
52-PM-8	PROVISIONS AND CONDITIONS PER "NOTES"
2019-37624	ROAD AND PUE, GONZALES TRUST
2020-74047	CC AND R's, AMENDED PER 2020-77001, 2021-40207, 2021-41720 AND 2021-54544
2020-77003	WELL AND INCIDENTALS, VONDERWERTH

TYPICAL ROAD SECTION
NOT TO SCALE

ADJACENT OWNERS	
A	PARCEL D PER 23 PM 127 MOGANI, ET AL DOC. 2020-71955
B	PARCEL 17 PER 22 PM 76 LANJEWAR / PADWAL DOC. 2018-2783
C	PARCEL A PER 34 PM 90 HANSEN / SPARKS DOC. 2019-36746

DATA TABLE	
1	S 56°09'35" E 453.82'
2	R=1541.62' D=26°19'10" L=708.16' CH=S 42°59'59" E 701.95'
3	S 29°50'24" E 285.90'
4	R=1482.47' D=14°03'24" L=363.70' CH=S 36°52'06" E 362.79'
5	S 43°53'48" E 436.75'
6	R=1096.01' D=30°16'35" L=579.16' CH=S 28°45'01" E 572.44'
7	S 13°36'13" E 294.58'
8	R=1482.47' D=11°09'36" L=288.93' CH=S 22°37'03" E 464.54' (TOTAL 8 TO 9)
9	R=1482.47' D=06°51'41" L=177.53'
10	S 31°37'54" E 626.66'
11	R=1577.96' D=06°54'02" L=190.05' CH=S 35°04'55" E 189.93'
12	S 38°31'56" E 168.73'
13	R=1302.47' D=11°07'34" L=252.77' CH=S 33°17'39" E 252.42'
14	S 28°03'22" E 313.88'
15	R=1959.91' D=11°59'09" L=410.00' CH=S 34°02'57" E 409.25'
16	S 40°02'31" E 400.00'
17	S 49°57'29" W 10.00'
18	S 40°02'31" E 336.07'
19	S 58°06'53" W 433.27'
20	S 71°10'29" W 143.09'
21	N 26°50'36" W 208.24'



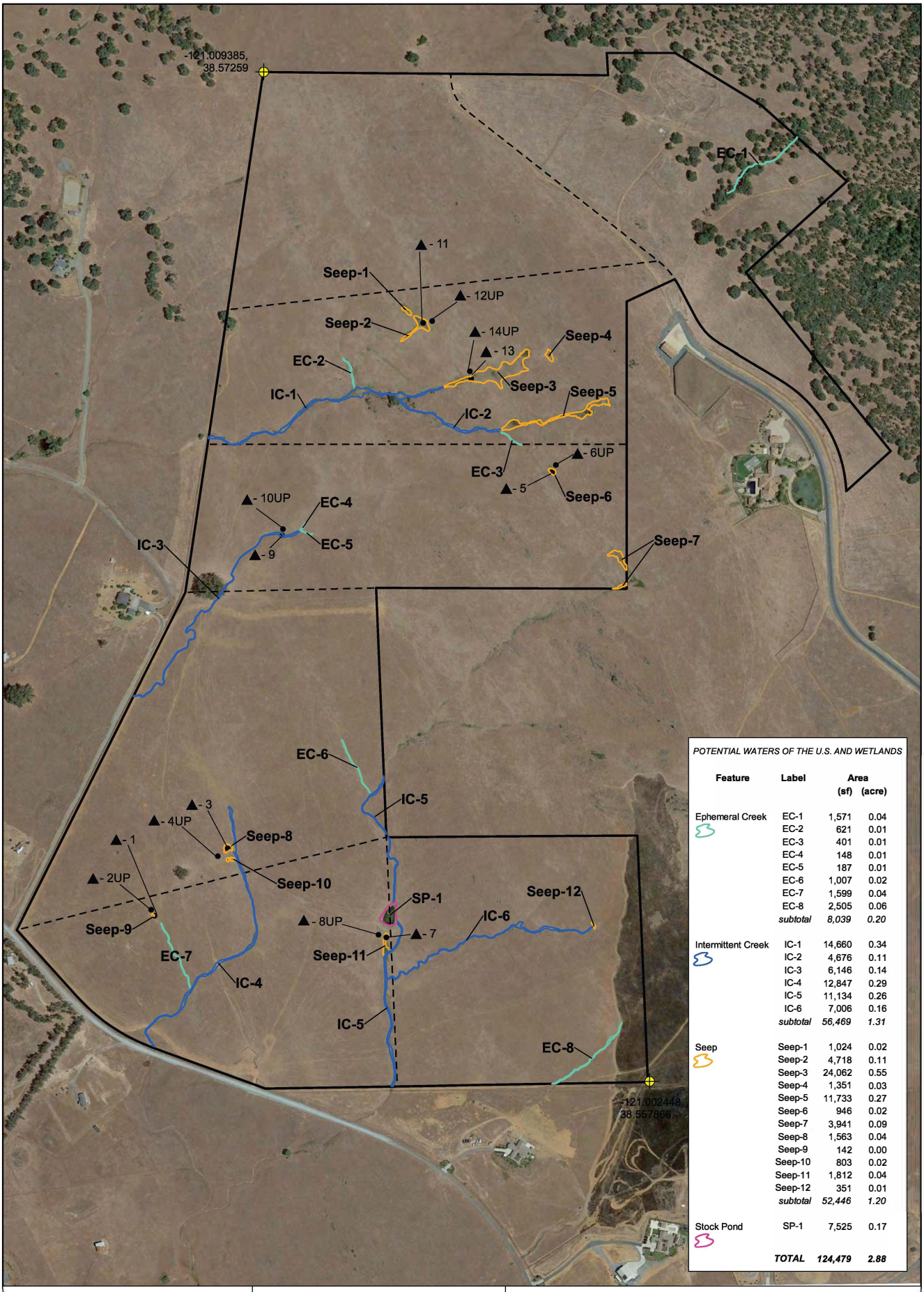
PLANNING COMMISSION: _____
APPROVAL / DENIAL DATE: _____

BOARD OF SUPERVISORS: _____
APPROVAL / DENIAL DATE: _____

*Figure not OCR compatible.

Attachment B

Aquatic Resources Delineation Map



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Aerial Source: Google Earth (06/2021)

Moore Biological Consultants

Study Area (±294 acres)

▲- 1 3-Parameter Data Point

0 250 500

N

Aquatic Resources Map

Victoria Way

El Dorado County, CA

Map Date: 08/03/2022

*Figure not OCR compatible.

Attachment C

January 11, 2024 Email

From: **Bianca L. Dinkler** Bianca.Dinkler@edcgov.us
Subject: Supplemental Wetlands Information Requested ~ Rancho Victoria (TM22-0004)
Date: January 11, 2024 at 8:39 AM
To: moorebio@softcom.net
Cc: Matthew Toma matt@tomasurvey.com

BD

Hello Diane,

I am working on a proposed Tentative Subdivision Map, Rancho Victoria (TM22-0004), and upon further discussion with the environmental consultant, Raney & Associates, that will be preparing the CEQA document, supplemental wetlands information is requested:

While the aquatic resources delineation identifies the aquatic resources on the site, we need an assessment of the potential for the proposed project to impact the identified resources. Although details regarding future residential development on each parcel is uncertain at this time, the project team has identified conceptual home footprints that should be able to avoid on-site aquatic resources. However, the project will need to construct certain on-site roadway improvements, and possibly off-site improvements to Settler's Trail. An aquatic resources impact analysis should be provided for the proposed on-site and potential off-site roadway improvements. The potential roadway improvements can be generally described as:

On-Site

- Construction of partial realignment, extension, and cul-de-sac of Victoria Way; and
- Construction of access roads within 50-foot Common Access easements serving Lots A-1 through A-4.

Off-Site

- Widening of Settler's Trail to 20-foot cross-section.

Matt Toma, the project engineer/surveyor, has provided exhibits for your reference (see attached), showing anticipated crossings of drainage features. Please feel free to reach out to Matt at (209) 223-0156 for further details regarding the specifics of the roadway improvements.

Please let me know if you have any questions, and thank you in advance for your time and response to this.

Sincerely,
Bianca

Bianca Dinkler
Senior Planner

County of El Dorado
Planning and Building Department
2850 Fairlane Court, Building C
Placerville, CA 95667
Bianca.Dinkler@edcgov.us
(530) 621-5355 Main | (530) 621-5875 Direct

(530) 621-5355 Main | (530) 621-5875 Direct

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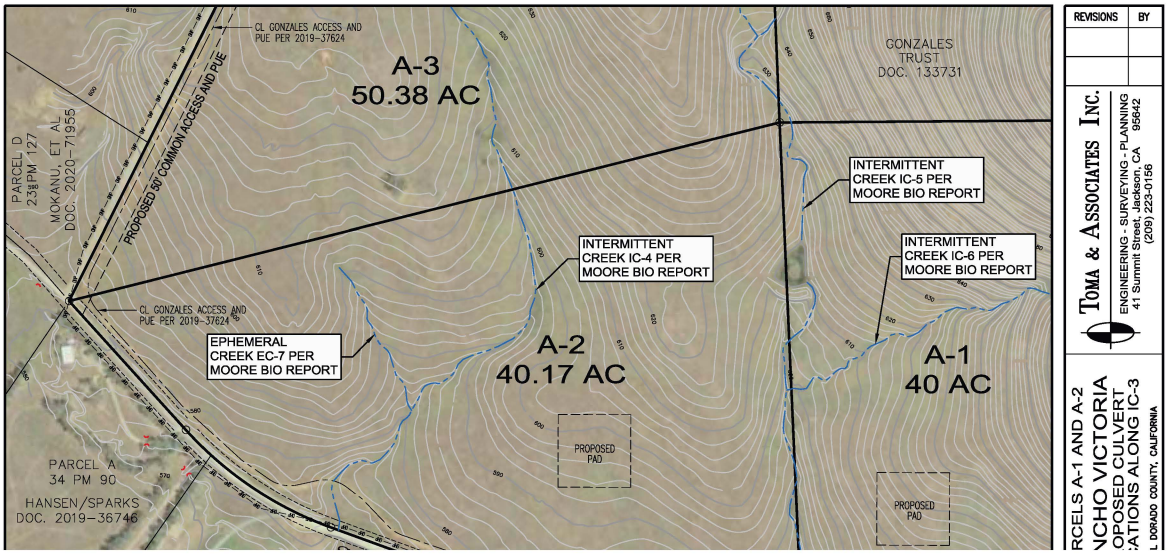


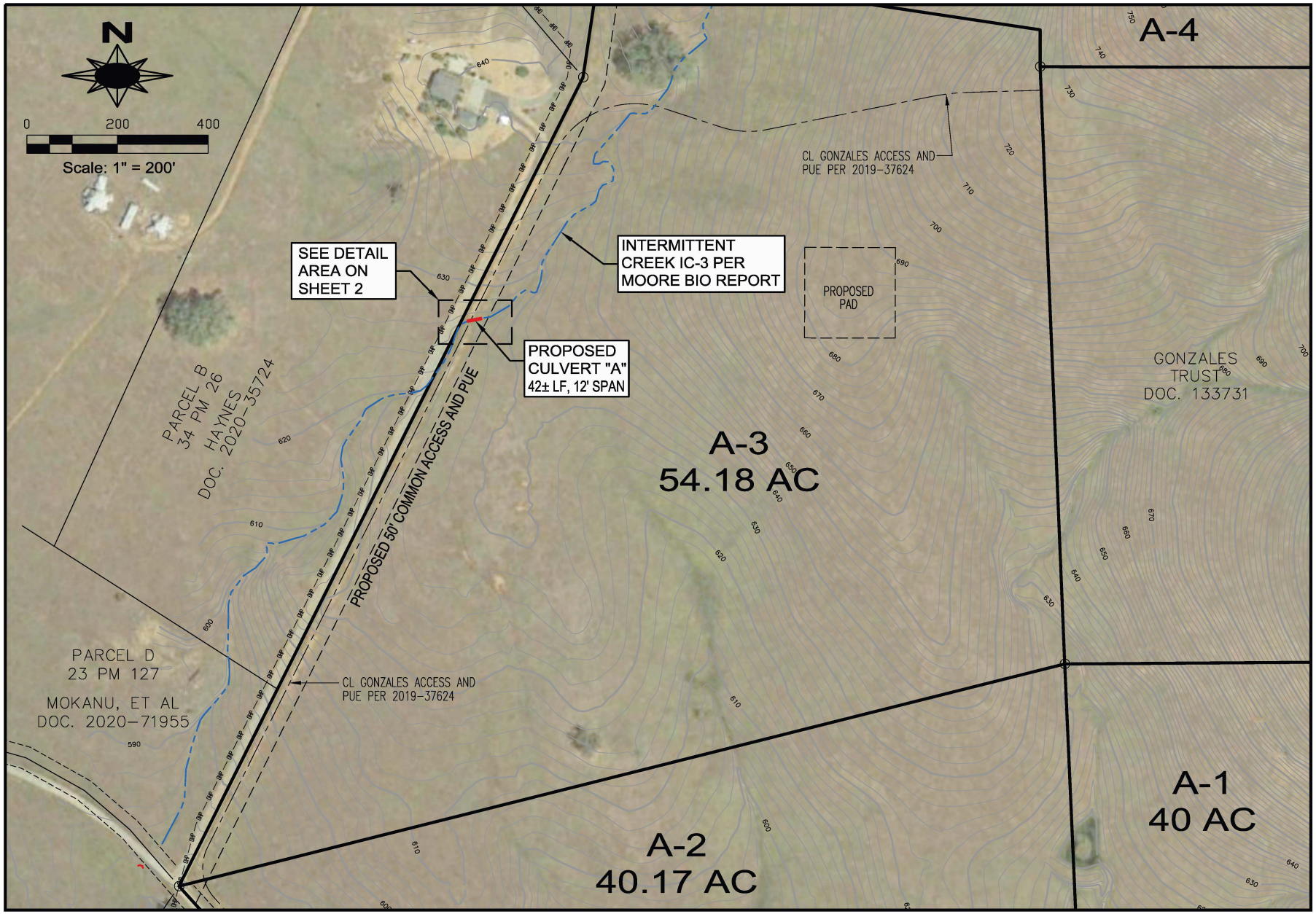
REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

RCELS A-1 AND A-2
NCHO VICTORIA
OPOSED CULVERT
CATIONS ALONG IC-3
L DORADO COUNTY, CALIFORNIA

Attachment D

Clear-Span Plan & Profile Exhibits



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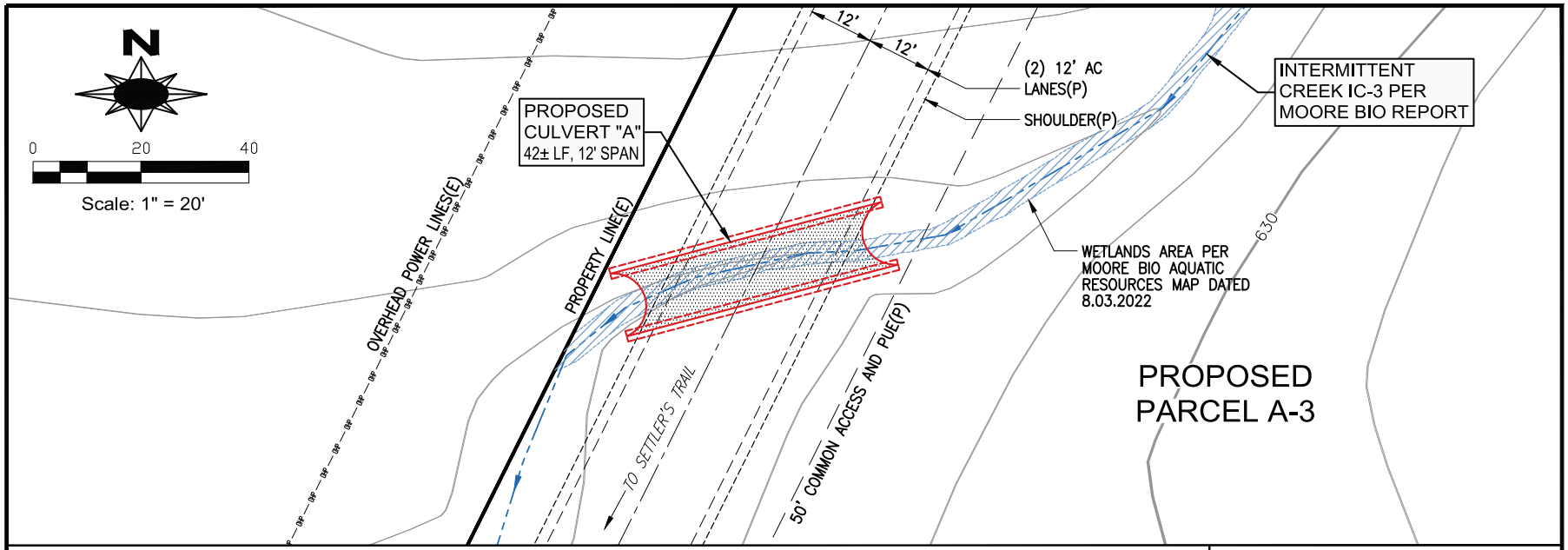
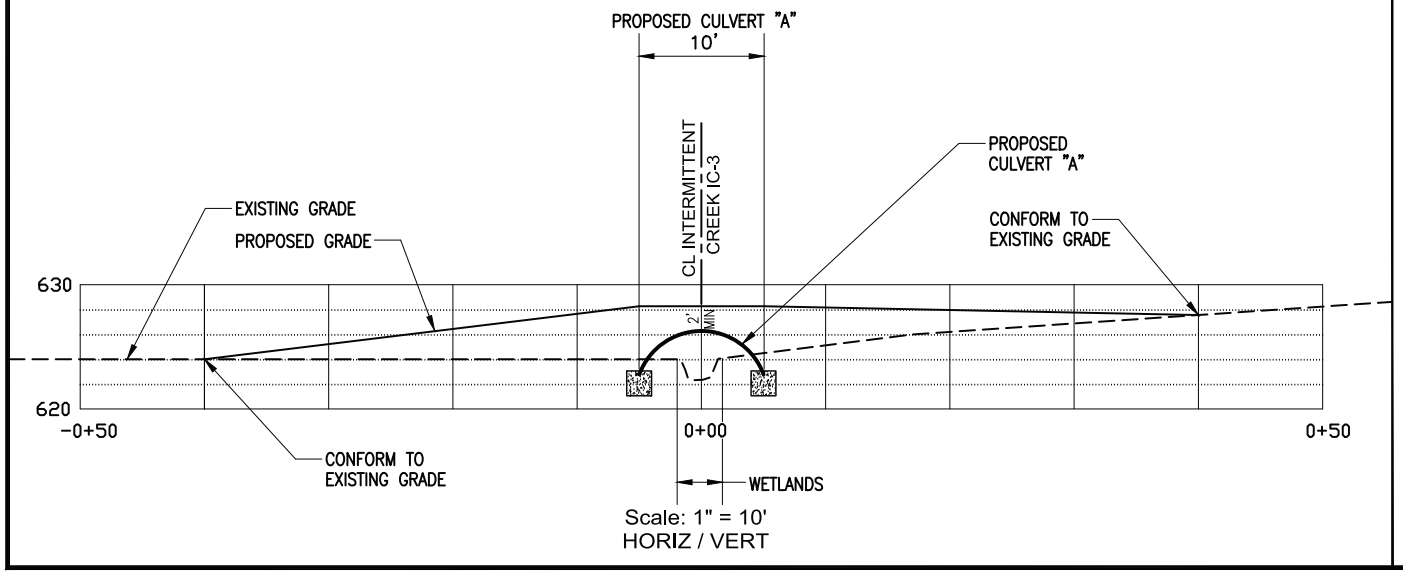
(209) 223-0156

PARCEL A-3
RANCHO VICTORIA
PROPOSED CULVERT LOCATIONS ALONG IC-3

EL DORADO COUNTY, CALIFORNIA

DATE: 2.28.2025
SCALE: 1"= 200'
DRAWN BY: GMW
JOB NO.: 2110-01
SHEET 1 OF 2 SHEETS





NOTE:

EXHIBIT MAPS ARE FOR LOCATION PURPOSES ONLY. CULVERT AND FOOTING DESIGN BY OTHERS.

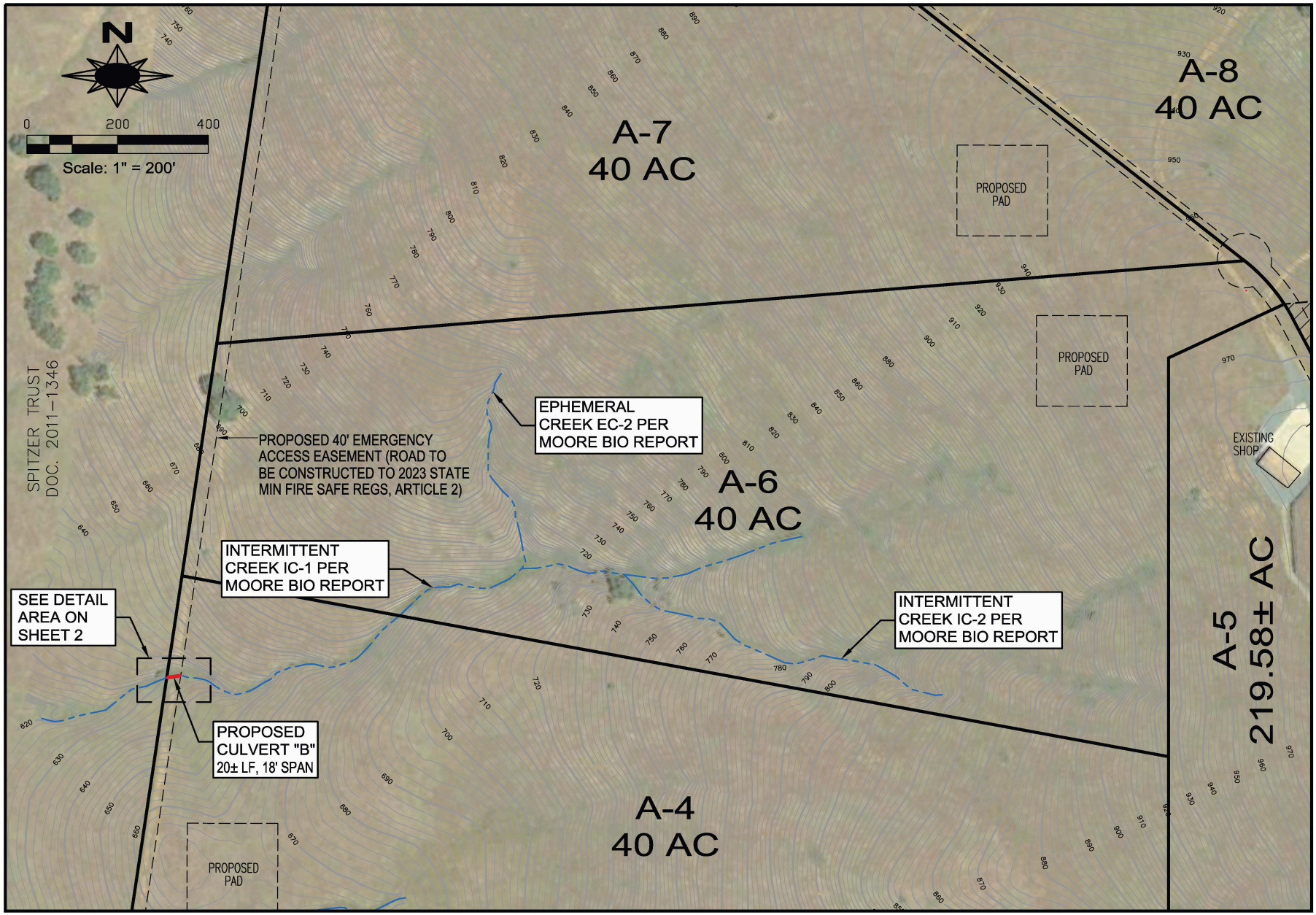
REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

PARCEL A-3
RANCHO VICTORIA
PROPOSED CULVERT LOCATIONS ALONG IC-3
EL DORADO COUNTY, CALIFORNIA

DATE: 2.28.2025
SCALE: 1"= 20'
DRAWN BY: GMW
JOB NO.: 2110-01

SHEET 2 OF 2 SHEETS

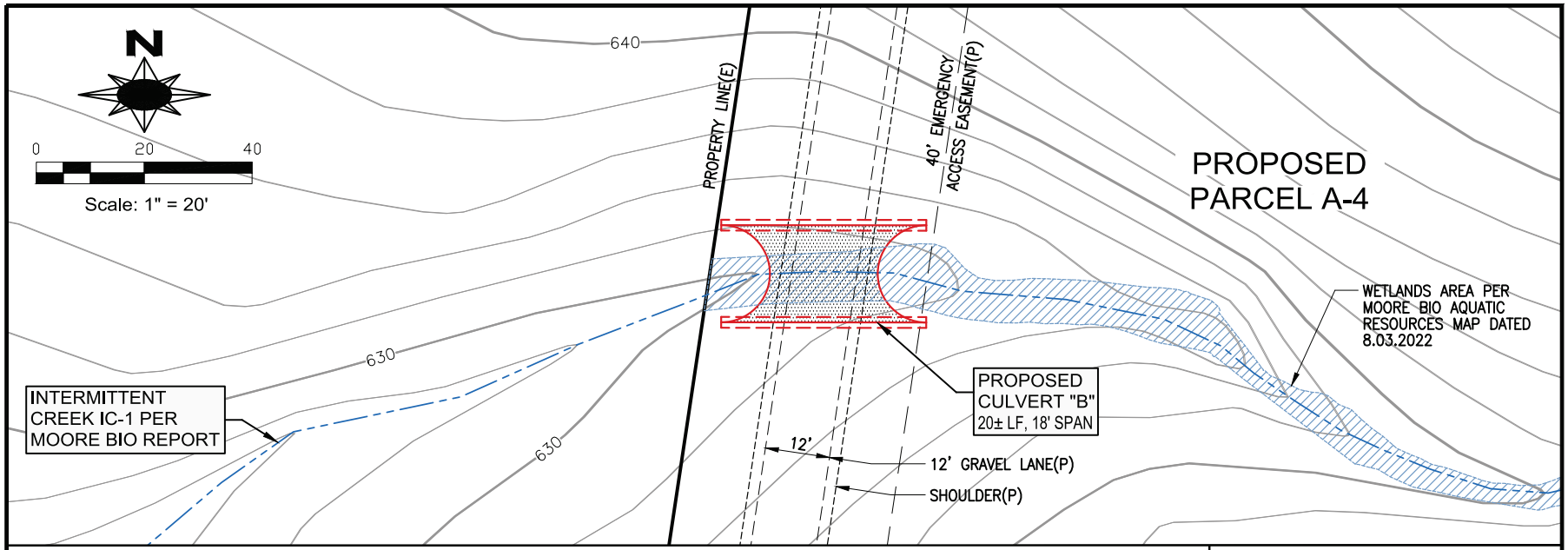


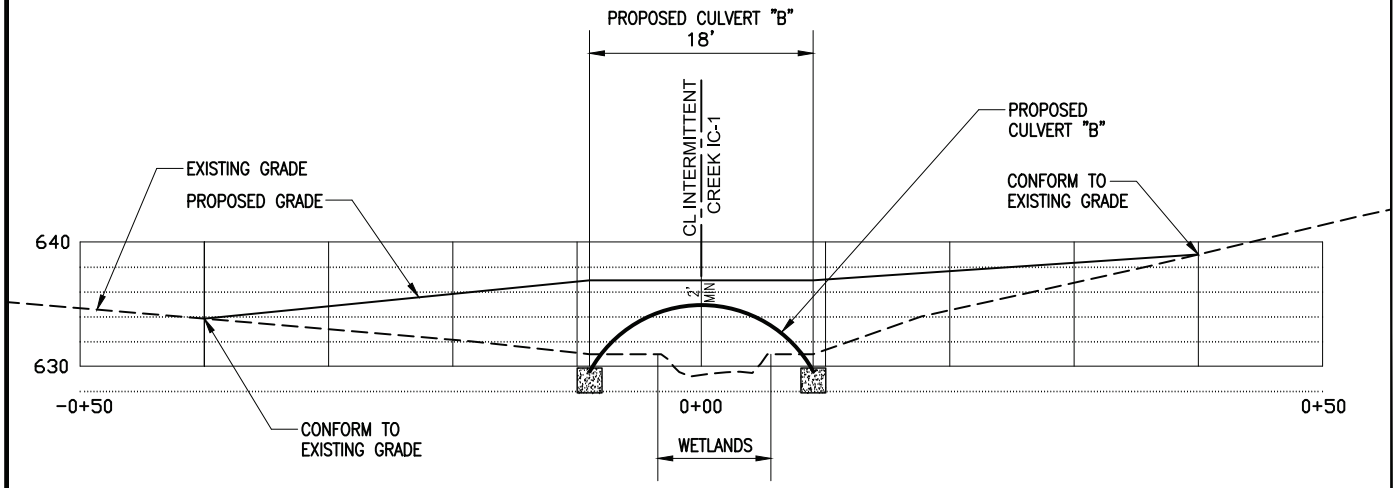
REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

PARCEL A-4
RANCHO VICTORIA
PROPOSED CULVERT
LOCATIONS ALONG IC-1
EL DORADO COUNTY, CALIFORNIA

DATE:	2.28.2025
SCALE:	1"= 200'
DRAWN BY:	GMW
JOB NO.:	2110-01
SHEET	1 OF 2 SHEETS





NOTE:

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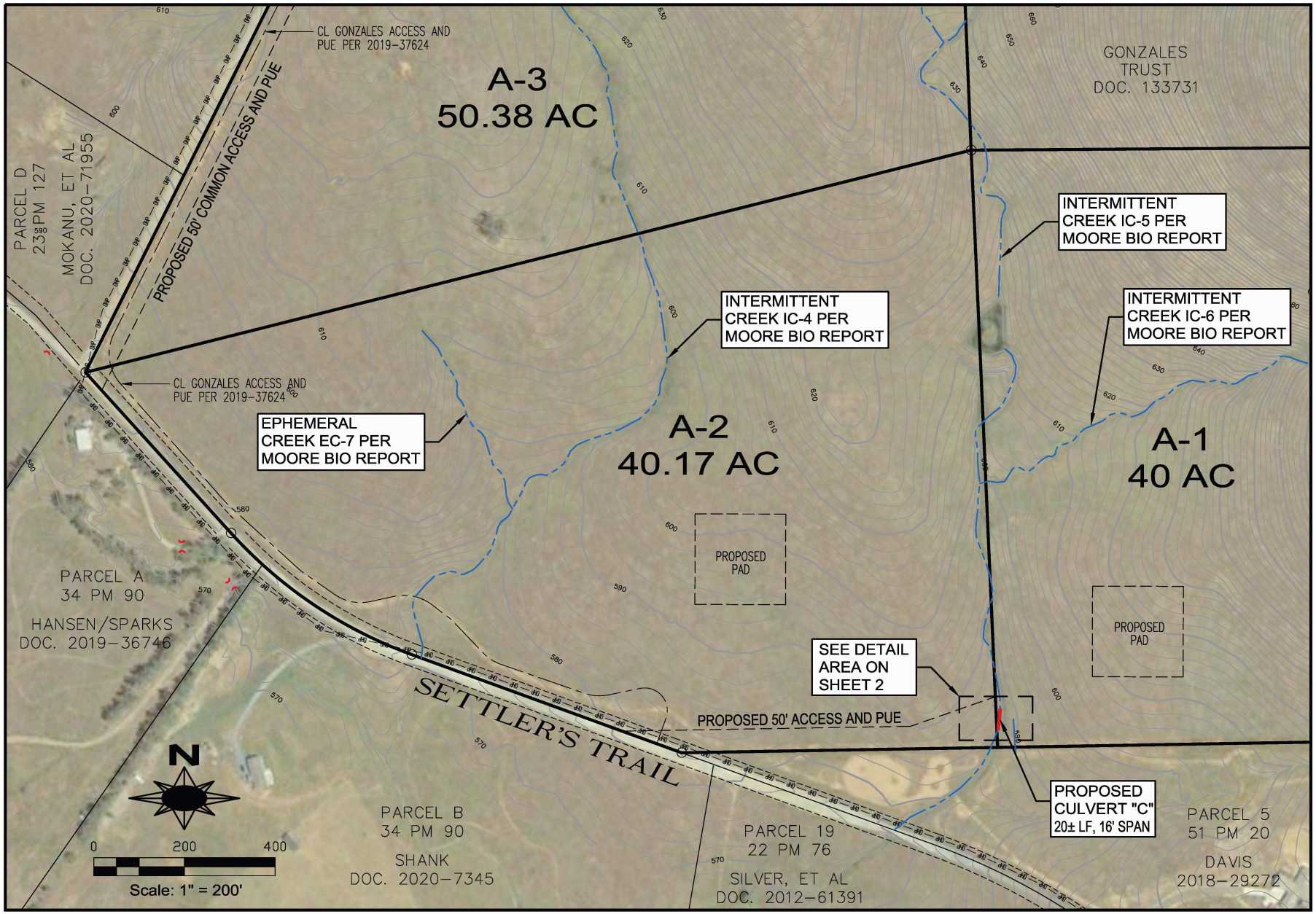
REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

PARCEL A-4
RANCHO VICTORIA
PROPOSED CULVERT LOCATIONS ALONG IC-1
EL DORADO COUNTY, CALIFORNIA

DATE: 2.28.2025
SCALE: 1"= 20'
DRAWN BY: GMW
JOB NO.: 2110-01

SHEET 2 OF 2 SHEETS



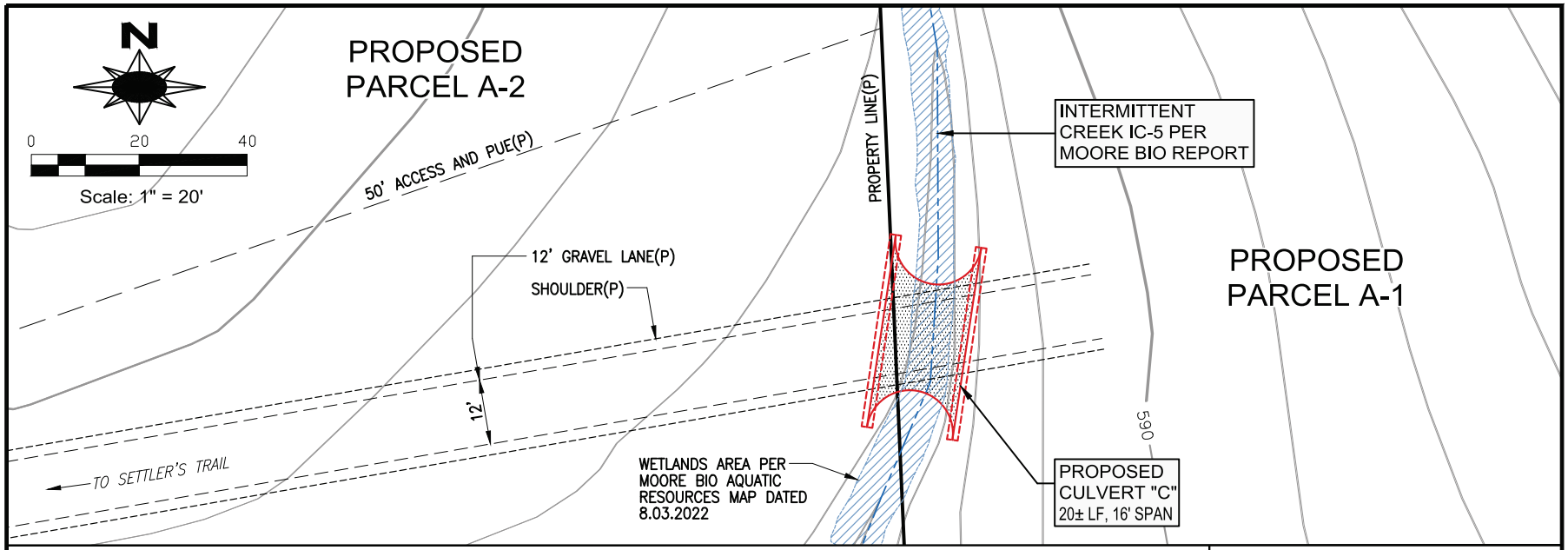
REVISIONS	BY

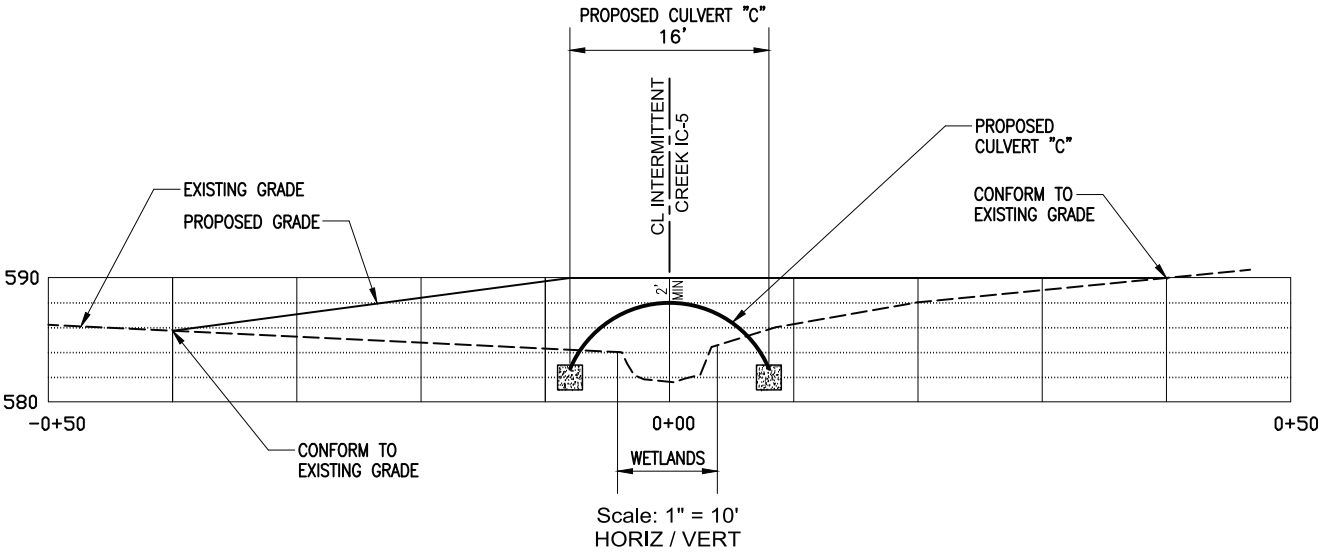
TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

PARCELS A-1 AND A-2
RANCHO VICTORIA
PROPOSED CULVERT LOCATIONS ALONG IC-5

EL DORADO COUNTY, CALIFORNIA

DATE: 2.28.2025
SCALE: 1"= 200'
DRAWN BY: GMW
JOB NO.: 2110-01
SHEET 1 OF 2 SHEETS





NOTE:

EXHIBIT MAPS ARE FOR LOCATION PURPOSES ONLY. CULVERT AND FOOTING DESIGN BY OTHERS.

REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

PARCELS A-1 AND A-2
RANCHO VICTORIA
PROPOSED CULVERT LOCATIONS ALONG IC-5

EL DORADO COUNTY, CALIFORNIA

DATE: 2.28.2025
SCALE: NOTED
DRAWN BY: GMW
JOB NO.: 2110-01
SHEET 2 OF 2 SHEETS

Attachment E

Photographs

Intermittent Creek IC-3, looking southwest at the location of proposed Clear-Span Crossing A; 01/10/25.

Location of proposed Clear-Span Crossing A, looking southwest along the road alignment; 01/10/25.

Intermittent Creek IC-1, looking west at the location of proposed Clear-Span Crossing B; 01/10/25.

Location of proposed Clear-Span Crossing B, looking north along the road alignment; 01/10/25.

Intermittent Creek IC-5, looking south at the location of proposed Clear-Span Crossing C; 01/10/25.

Location of proposed Clear-Span Crossing C, looking west along the road alignment; 01/10/25.

APPENDIX E

OAK WOODLANDS ASSESSMENT

RECEIVED

JAN 05 2023

EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

Foothill Resource Management
Steve Q. Cannon, RPF #2316
P.O. Box 818, Pine Grove, CA 95665
(209)419-1569

Mr. Rob Peters, Acting Director
Planning Department, County of El Dorado
2850 Fairlane Court
Placerville, CA 95667

18 November 2021

Re: Dynamic Trades, Inc. property, APN 087-010-043

Dear Mr. Peters,

At the request of Dynamic Trades, Inc, I conducted an inspection of the property referenced above. I was told by Ms Gina Waklee of Toma and Associates that the Planning Department has required that an Oak Woodlands Assessment shall be done for the parcel since they are planning a subdivision of the property. This letter is in response to that requirement.

Section 21083.4 of the California Public Resources Code requires that counties determine if *there will be a significant effect on oak woodlands as a result of a project proposed to the* county. The first question that must be answered is whether a project area does indeed qualify as an "Oak Woodland". The Fish and Game Code of the State of California defines "Oak Woodland" under Section 1361(h) as "... oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10% canopy cover". Additional important information comes from PRC 21083(a), where it is stated that oaks included in the determination of oak woodland status cannot come from the Group A or Group B commercial species as defined by 14 CCR 895.1 (Forest Practice Rules). California Black Oak (Quercus kellogii), a species common at the elevation of APN 038-010-117, is a Group B species under the Forest Practice Rules.

On the 17th of November, 2021, I visited the Dynamic Trades, Inc. property and conducted an evaluation of the property. It seemed to be obvious from the air photos and a casual drive-by that a portion of this property would qualify as an "Oak Woodland", as defined by the Fish & Game Code. As a requirement of that assumption, I walked the parcel from south to north on the side hill above the railroad tracks. I changed the bearing of my transect by periodically heading in a northwest direction and then back to the northeast. I measured forest inventory plots every 150 feet, taking note of the oak stand basal area, diameters at breast height (dbh), spacing between trees and estimating crown diameters in the area noted on the Tentative Parcel Map as "Oak Preservation Area". Parcel A-5 is shown as being 219.58 acres, including the oak preserve. Of that parcel 74 acres are open pasture with no oaks and 4 acres are oak woodland that is not included in the 145 acre Oak Preservation area. The remaining proposed parcels are devoid of oak trees and apparently have not historically been forested with oaks.

On the attached topographic map, I have delineated the areas covered with native oaks. I used a plenimeter to estimate the number of square inches of oak canopy coverage and converted the total square inches to acres using a conversion factor of 102 acres per square inch.

TM22-0004

The results of my calculations and estimations are as follows:

Species encountered –Blue oak (Quercus douglasii) is the dominant species with a minor amount of Interior live oak (Quercus wislizeni). Gray pine (Pinus sabiniana) is also a minor associate with the oak forest on the Dynamic Trades, Inc. property. All of the oak species on the Dynamic Trades, Inc. property are native oaks and fall under the requirements for classification of native oak woodland as specified by PRC 21083.4.

Diameter range of native oaks – 4 inches DBH to 18 inches DBH

Average oak diameter @ 4.5 ft. above ground – 12 inches

Average spacing between oak trees – 20 feet (range of 3 ft. to 50 ft.)

Average number of oak trees per acre – 200 trees/ac.

Average oak basal area per acre – 60 sq. ft./ac.

Average crown diameter – 30 feet (range of 15 - 50ft.)

Estimated acreage of oak forest with live oak canopy – 145 acres

The total acreage of the Dynamic Trades, Inc. property associated with this proposed subdivision is 519 acres. The area forested with all oak species is 149 acres, of which approximately 145 acres are planned for preservation. An area of approximately 4 acres exist on the southwest side of the Oak Preservation Area. While the ultimate plan for that area is not known at this time, it still is part the total oak woodland. By my estimation, the total 519 acre property is 28% oak woodland, but the area planned for oak preservation is 100% oak woodland and if the acreage of Parcel A-5 is considered, that parcel is approximately 66% oak woodland.

The second question that is necessarily needing to be answered is: "Will the proposed subdivision of this property result in a significant impact to the Oak Woodland?"

The proposed subdivision would split the property into eight parcels of 40, 40.17, 50.38, 40, 41.88, 41.92, 40, & 219.58 acres. One residence exists on the property. There is evidence that the property has been grazed in the past. The impact of cattle grazing on oak woodlands is that many seedlings are grazed or trampled by cattle and the effect is to minimize the perpetuation of young oak trees.

While I cannot anticipate the use of the proposed parcels by the eventual landowners, the parcel sizes proposed could continue to sustain cattle ranching. All the proposed parcels except for Parcel A-5 are outside of the oak woodland preservation area and if cattle are allowed to graze those parcels, the oak woodland is not likely to expand through natural regeneration. Parcel A-8 has some oak canopy coverage, but it is a minor amount of the 40 acre parcel and any development on that parcel is not likely to eliminate the oak canopy. Any residential development on the other parcels outside of the oak woodland will not have any impact on oak woodland.

In summary and to reiterate, the Dynamic Trades, Inc. property definitely qualifies as an Oak Woodland under the California Fish & Game Code. The answer to the second question required under PRC 21083.4 is that in my professional opinion, the proposed Dynamic Trades, Inc. property division will not result in a significant reduction of oak woodland area, as long as the 145 acres of Oak Preservation Area is protected against development.

If you have any questions, please feel free to call.

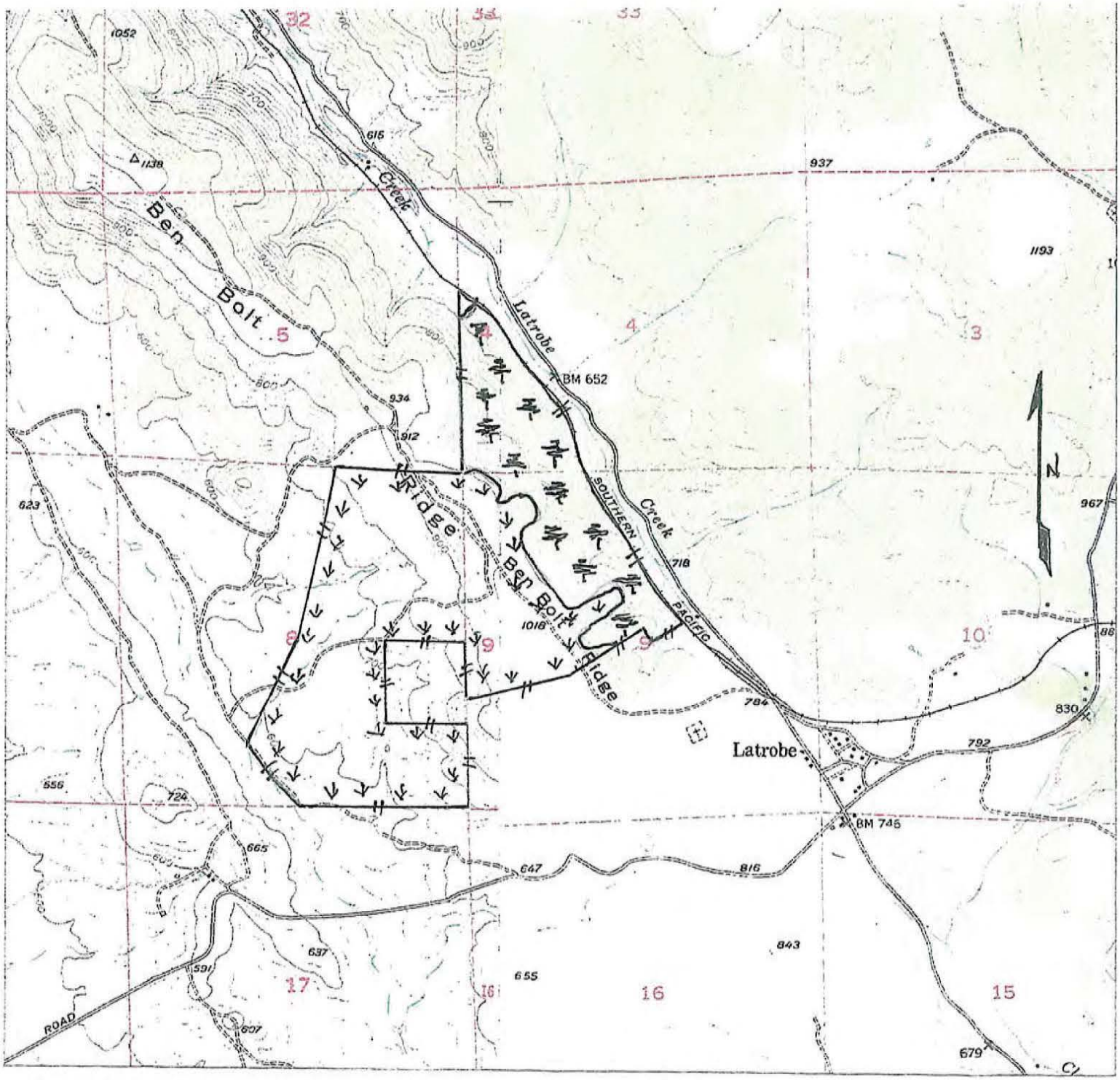
Sincerely,

Steve Q. Cannon, Registered Professional Forester #2316

attachments

Dynamic Trades Oak Woodlands Report

Township 8 North, Range 9 East, Sections 4, 8, 9 MDB&M
Latrobe & Folsom S.E. 7.5' Quadrangles
El Dorado County



Dynamic Trades, Inc. Property Boundary (approx)

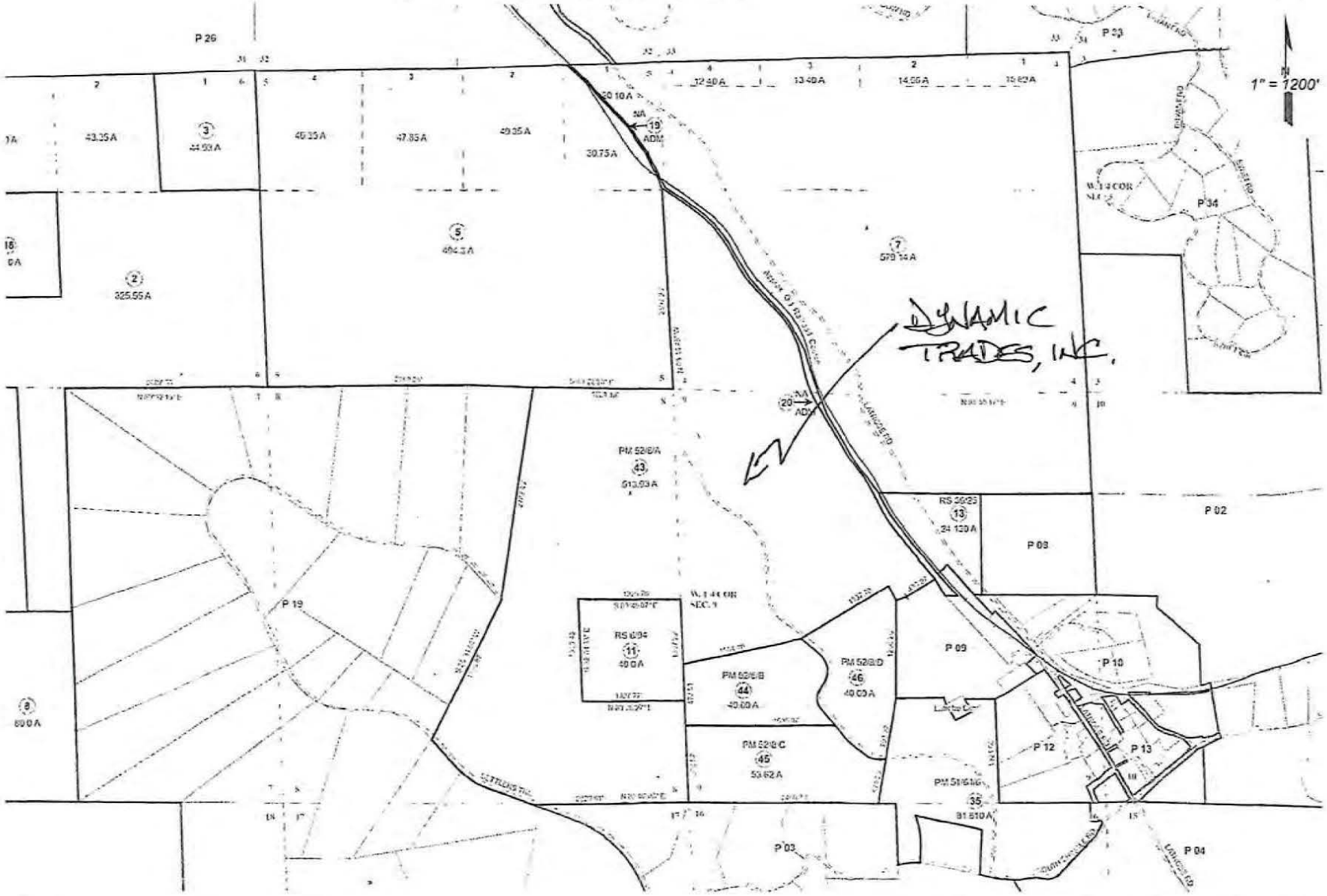
Oak woodland

Open pasture (non-oak)

Scale

0 2112 ft.

Dynamic Trades Oak Woodlands Report
Township 8 North, Range 9 East, Sections 4, 8, 9 MDB&M
Latrobe & Folsom S.E. 7.5' Quadrangles
El Dorado County



Dynamic Trades Oak Woodlands Report

Township 8 North, Range 9 East, Sections 4, 8, 9 MDB&M

Latrobe & Folsom S.E. 7.5' Quadrangles

El Dorado County

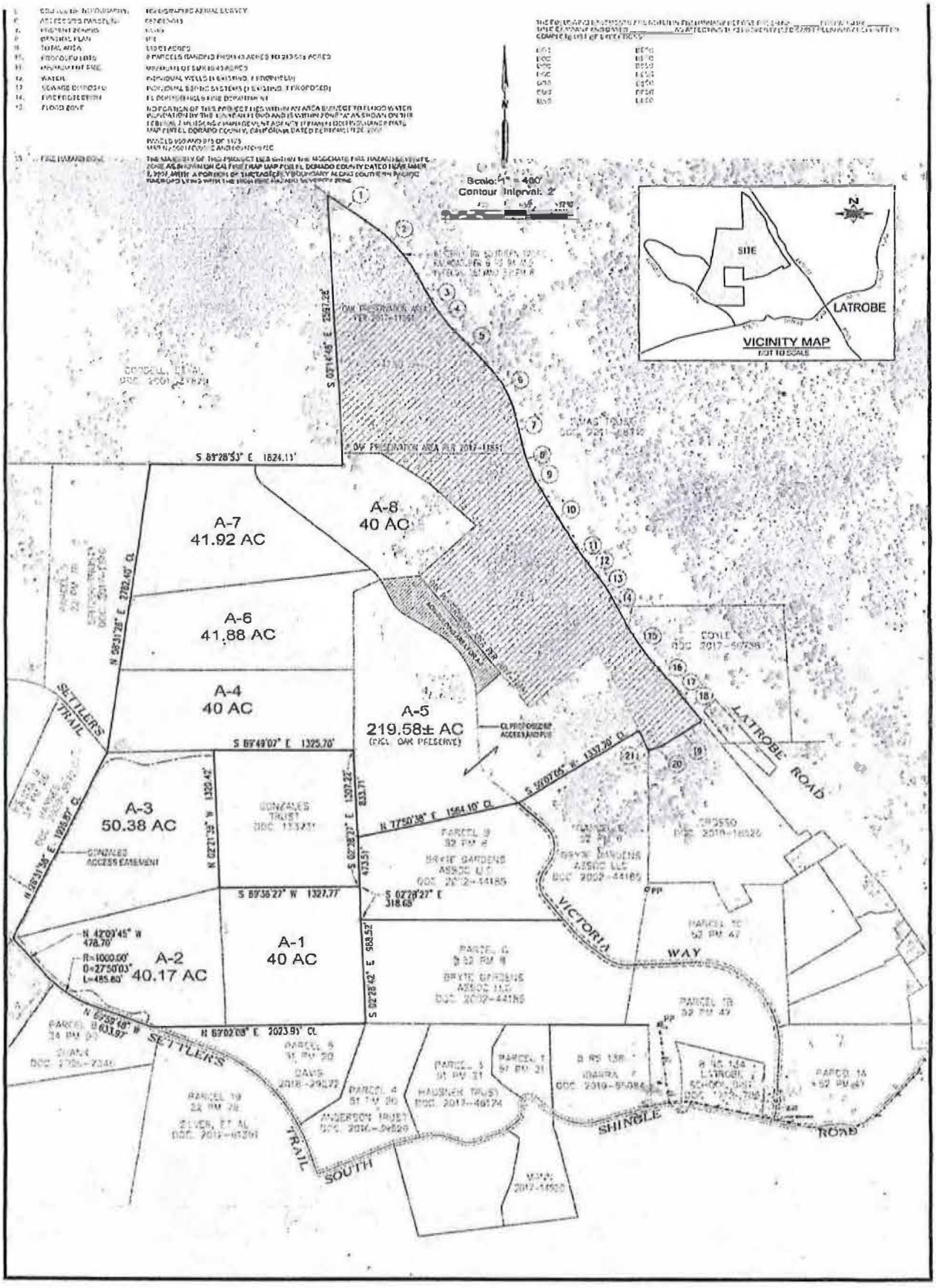


*Figure not OCR compatible.

APPENDIX F

GEOTECHNICAL FEASIBILITY STUDY

RECEIVED

JAN 05 2023

EL DORADO COUNTY
PLANNING AND BUILDING DEPARTMENT

GEOTECHNICAL FEASIBILITY STUDY
FOR
RANCHO VICTORIA SUBDIVISION

4250 Victoria Way
Shingle Springs, California

Project No. E13184.005
March 2022

YOUNGDAHL

ESTABLISHED 1984

TM22-0004

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

Dynamic Trades, Inc.
4617 Weed Patch Court
Greenwood, California 95635

Project No. E13184.005
4 March 2022

Attention: Mr. Elliot Pope

Subject: **RANCHO VICTORIA SUBDIVISION**
4250 Victoria Way, Shingle Springs, California
GEOTECHNICAL FEASIBILITY STUDY

References:
1. Tentative Parcel Map, prepared by Toma & Associates, dated November 2021.
2. Proposal and Executed Contract for Rancho Victoria Subdivision, prepared by Youngdahl Consulting Group, Inc., dated 6 January 2022 (Proposal No. PE21-744).

Dear Mr. Pope:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has performed a Geotechnical Feasibility Study for the project site located at 4250 Victoria Way in Shingle Springs, California. The purpose of this study was to address the feasibility, from a geotechnical standpoint, of constructing the proposed development. Our scope was limited to a site reconnaissance, a limited subsurface exploration program, laboratory testing of site soils, review of available and applicable documents, and the preparation of this report per the referenced proposal.

Based upon our site reconnaissance, limited subsurface exploration, laboratory testing, and geotechnical data review, it is our opinion that the primary geotechnical issues to be addressed consist of excavations into bedrock, the presence of highly expansive clay, and drainage related to shallow bedrock conditions. 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, and conclusions provided in this report are formulated as a whole; specific conclusions 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 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.

Francisco J. Saldana
Staff Geologist

Reviewed by:

Kyle J. Martinez, P.E.
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
KYLE J. MARTINEZ
No. 80666
CIVIL
STATE OF CALIFORNIA

Distribution: PDF to Client

TABLE OF CONTENTS

1.0 INTRODUCTION **1**

2.0 SITE CONDITIONS **2**

3.0 CONCLUSIONS **4**

4.0 ANTICIPATED DESIGN CRITERIA **6**

5.0 CLOSURE **9**

Appendix A **10**

Introduction 11

Vicinity Map (Figure A-1) 12

Site Map (Figure A-2) 13

Logs of Exploratory Test Pits (Figures A-3 through A-16) 14

Soil Classification Chart and Log Explanation (Figure A-17) 28

APPENDIX B **29**

Direct Shear Test (Figure B-1) 30

Modified Proctor Test (Figure B-2) 31

R-Value Test (Figure B-3) 32

Expansion Index Test (Figure B-4) 33

Chain of Custody Form 34

NOA Test results 35

GEOTECHNICAL FEASIBILITY STUDY
FOR
RANCHO VICTORIA SUBDIVISION

1.0 INTRODUCTION

This report presents the results of our geotechnical feasibility study performed for the proposed development planned to be constructed at 4250 Victoria Way in Shingle Springs, California. The vicinity map provided on Figure A-1, Appendix A shows the approximate project location.

Purpose and Scope

The scope of work for the geotechnical feasibility study included an initial geotechnical site reconnaissance, review of available geotechnical data for the approximate project area, limited subsurface exploration and laboratory testing programs, and assessment of potential geotechnical constraints. The study is based, in part, upon information provided by the client.

The purpose of the geotechnical feasibility study was to assess the major geotechnical issues that could potentially affect the project, thus providing a framework for continued project planning. The intent of this report is to provide information regarding general site characteristics, including identification of any geotechnical characteristics that could constitute a constraint to the use of the land for the proposed residential development, and to provide guidance for a future geotechnical engineering study. This report is not intended to fulfill the criteria for geotechnical reports outlined in Chapter 18 of the 2019 California Building Code (CBC) or other jurisdictional requirements; investigations fulfilling those criteria will still need to be completed when the project reaches its appropriate stage. This report is intended to be used by the client in planning the project.

In the event that there are any changes in the proposed development concept, or if any of the assumptions used in the preparation of this report prove to be incorrect, the conclusions contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report verified or modified by this firm in writing. The conclusions presented in this report are considered qualitative until such time as they are modified or verified by additional study such as that performed during a design-level geotechnical engineering investigation.

Project Understanding

We understand that the project will consist of a parcel split of 4250 Victoria Way and the development of seven parcels, identified as Parcels A-1 through A-4 and A-5 through A-8 on the referenced parcel map, within the Rancho Victoria Subdivision in Shingle Springs, California. Each parcel will be between approximately 40 and 50 acres, and presumed to be developed with single-family residences. For the purposes of this report, we assume that the residences will be one to two stories, of wood-frame construction, and supported by conventional shallow foundations and slab-on-grade floors. Additional site improvements will likely entail sitework retaining walls, pedestrian flatwork, and driveway access.

Background

Based on a limited review of aerial photography, the project site has remained largely undeveloped. 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.

2.0 SITE CONDITIONS

The following section describes our findings regarding the site conditions that we observed during our site reconnaissance and subsequent subsurface explorations.

Surface Observations

The project site is located on the west side of Victoria Way in Shingle Springs, California. The project site extends west from Victoria Way to Settlers Trail and north of S Shingle Road. In general, it is bounded by rural, single-family residences on every side. It is irregularly shaped and encompasses approximately 295 acres of undeveloped land, primarily used for grazing.

The site generally slopes down to the southwest from a ridge to the northeast. The sloping terrain was observed to have a maximum gradient of approximately 4H:1V (Horizontal:Vertical), with more gentle slopes of roughly 7H:1V observed on the southwest side, adjacent to Settlers Trail. The site is surfaced with seasonal grasses and sparse trees. Rock outcroppings were observed throughout the majority of the site. The following sub-headings provide a more specific description of each parcel.

Parcel A-1

This parcel is located on the southeast corner of the site, slopes to the west, and two prominent drainages transect its southeast corner and its north side. Running water was observed in the drainage located on its north side. Foliated, metavolcanic bedrock outcrops were observed on its east side. This parcel was observed to have a maximum gradient of approximately 6H:1V.

Parcel A-2

This parcel is located on the southwest corner of the site, adjacent to Settlers Trail. This parcel consists of gently sloping terrain with two prominent drainages transecting its eastern perimeter and its center. Foliated, metavolcanic bedrock outcrops were observed throughout the parcel.

Parcel A-3

This parcel is located on the southwest center of the site, slopes to the west and a single prominent drainage runs from the north to the south through its center. Vertical relief on the order of approximately 90 feet was observed. The parcel was observed to have a maximum gradient of approximately 10H:1V.

Parcel A-4

This parcel is located on the north center of the site, slopes to the west, and contains a lower order drainage. Foliated metavolcanic bedrock outcrops were observed on the east side of the parcel. The parcel was observed to have a maximum gradient of approximately 7H:1V. Vertical relief of approximately 170 to 190 feet was observed.

Parcel A-6

This parcel is located on the north center of the site, slopes to the west, contains a single prominent drainage and multiple lower order drainages. Closely foliated and moderately foliated metavolcanic bedrock outcrops were observed throughout the parcel. A prominent drainage channel was observed to transect the center of the parcel and expose large bedrock outcroppings. The parcel was observed to have a maximum gradient of approximately 5H:1V. Vertical relief on the order of approximately 300 feet was observed.

Parcel A-7

This parcel is located on the northwest corner, slopes to the west, and contains multiple lower order drainages. Closely to moderately foliated metavolcanic bedrock outcrops were observed

throughout the parcel. The parcel was observed to have a maximum gradient of approximately 6H:1V and vertical relief on the order of 250 to 260 feet.

Parcel A-8
This parcel is located on the northeast corner and gently slopes to the east. In generally, this parcel had the least variation in topography. It was observed to have a maximum gradient of approximately 15H:1V and vertical relief on the order of 50 to 70 feet.

Subsurface Conditions
The scope of this study included a limited subsurface exploration program to provide preliminary information regarding the subsurface conditions. The exploration program included the excavation of 14 exploratory test pits to evaluate the near surface soils and depth to bedrock. The approximate locations of the test pits are presented on Figure A-2, Appendix A.

In general, the subsurface conditions across the site consisted of a thin layer of soil overlying bedrock. The soil conditions appeared to consist of a thin layer of silty sand and sandy silt. In some of the test pits, these soils were underlain by a ½ foot to 3 ½ -foot layer of clay, subsequently underlain by bedrock. Bedrock was observed to consist of closely fractured to moderately fractured metavolcanic bedrock in a completely weathered (closer to the surface) to slightly weathered (generally found at depth) and soft to hard condition.

Laboratory Testing
Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil underlying the site. A description of the tests performed for this project and the associated test results 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-13 @ 0-1'	Φ = 36.9°, c = 0 psf (90% RC)
Maximum Dry Density	ASTM D1557	TP-13 @ 0-1'	DD = 124.9 pcf, MC = 11.6 %
Resistance "R" Value	CTM 301	TP-13 @ 0-1'	"R" Value = 35
Expansion Index	ASTM D4829	TP-8 @ 1-3'	EI = 154 (Very High)

Groundwater Conditions
A permanent groundwater table was not encountered at the project site and is expected to be relatively deep with no impact to the development of the site. Due to the shallow depth and low permeability of the underlying bedrock, however, perched water is common, and could be encountered during and/or following grading operations. The presence of perched water varies due to several factors, including, the proximity to rock, relative topographic elevations, and the presence and proximity of surface waters. Some evidence of past repeated exposure to subsurface water may include black staining, clay deposits, and surface markings indicating previous seepage. Based on our experience in the area, water may be perched on the bedrock horizon found beneath the site and could vary through the year with higher concentrations during or following precipitation.

3.0 CONCLUSIONS

In our opinion, the site appears suitable, from a geotechnical standpoint, for the proposed improvements. No conditions were observed that would constitute a sufficiently severe geotechnical constraint that constructing the proposed project would be precluded. The primary geotechnical concerns anticipated at this site include excavations into bedrock, drainage related to the shallow bedrock condition, and the presence of highly expansive clay. The potential for excessive total and differential settlement, liquefaction, slope stability, and naturally occurring asbestos are also discussed below. The degree to which the above constraints will affect the project should be assessed within a design-level investigation and report once the project reaches its appropriate stage.

Excavations into Bedrock

Based on our experience in the area, we expect that the site soils can be excavated using conventional earthmoving equipment such as a Caterpillar D6 to D8 for grading and rubber-tired backhoe for trench excavations not extending to the underlying bedrock materials. The underlying bedrock materials can likely be excavated to depths of several feet using a Caterpillar D9 or larger, equipped with a single or multiple shank rippers, or similar equipment. However, blasting cannot be ruled out in areas of resistant rock. Pre-ripping during mass grading may be beneficial and should be considered with the Geotechnical Engineer prior to, or during mass grading.

Utility trenches will likely encounter hard rock excavation conditions especially in deeper cut areas. Utility contractors should be prepared to use special rock trenching equipment such as large excavators (Komatsu PC400 or CAT 345 or equivalent). Blasting to achieve utility line grades, especially in planned cut areas, cannot be precluded. Water inflow into any excavation approaching the hard rock surface is very likely to be experienced in all but the driest summer and fall months.

Drainage

Proper application of drainage practices is considered to be of paramount concern for the effective development of each parcel and to provide long term stability of the structural improvements. It has been our experience that sites constructed within this area generally have an increased potential for moisture related issues related to water perched on the bedrock horizon and/or present in the fractures of the bedrock as well as moisture transmission through utility trenches. Potential sources of groundwater may not be present or observed during the site grading procedures, but can appear later as more persistent seepage as water becomes perched or flows through fractures of the bedrock. These conditions are generally more prevalent during times of high precipitation.

To reduce the potential of these issues, application of the drainage provisions provided in the 2019 CBC are imperative, as well as additional drainage improvements. Swales and natural hillside drainage at the site which is to receive engineered fill will likely require the installation of canyon style drains. Additionally, in developments with the potential for a perched groundwater condition, underground utilities can become collection points for subsurface water. Therefore, we will likely recommend that plug and drains be installed within the utility trenches 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. Lastly, proper surface drainage, and careful installation of subdrains and back of retaining wall drains will be necessary to provide long term stability of the structural improvements as well as mitigate nuisance seepage. Once plans are developed, the civil engineer should coordinate with us to discuss the locations of plug and drains.

Expansive Soils

The majority of the materials encountered across the site are considered to be generally non-plastic (rock, sand, and non-plastic silt), which are considered to be nonexpansive; however, concentrations of clay may be encountered overlying bedrock. Based on our limited subsurface exploration program, these materials were found to be ½ foot to 3 ½ feet thick; however, they may be found in higher concentrations. Expansion index testing was performed for a selected clay sample, which resulted in a value of 154. Based upon the expansion index test results, the clay encountered at the site in considered to have a very high potential for expansion.

Expansive soils tend to swell with seasonal increases in soil moisture and shrink during the dry season as soil moisture decreases; the upper 3 to 4 feet of soil is the zone most affected by these seasonal soil moisture fluctuations. The volume changes that the soils undergo in this cyclical pattern can stress and damage slabs, foundations, and other improvements if precautionary measures are not incorporated into the design and construction procedure. To reduce the potential for damage related to expansive soils, special design considerations may be necessary. These may include the mixing of expansive and nonexpansive soils during mass grading operations, focused clay excavations, and/or special foundation and slab construction recommendations.

Total and Differential Settlement

Total and differential settlement under static conditions can occur when foundations span materials having variable compression and/or low density characteristics. Based upon the subsurface conditions anticipated and our experience in the area, the upper soils at the site are expected to be in a soft to medium stiff condition. When subjected to additional loading, soft soils tend to settle more than soils in a stiff condition or bedrock. Foundations spanning across transition lines (e.g. rock to soil, or native soil to engineered fills) can result in excessive differential settlement, which can stress and possibly damage foundations, often resulting in cracks and displacement. To reduce the potential for excessive total and differential settlement under static conditions, a program of overexcavation and recompaction and/or special foundation construction recommendations will likely be necessary.

Liquefaction

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 anticipated 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 negligible. For the above-mentioned reasons mitigation for these potential hazards is not anticipated to be necessary for the development of this project.

Slope Stability

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 slopes. No other indications of slope instability such as seeps or springs were observed. Additionally, due to the absence of a permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to bedrock, the potential for seismically induced slope instability for the existing

slopes is considered negligible.

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. El Dorado County published a map dated 24 August 2018 that qualitatively indicates the likelihood for NOA in western El Dorado County. Based on the published map, the site is not located within an NOA review zone, however, our study included the collection and testing of two representative samples for the evaluation of NOA. Both samples were analyzed and did not detect the presence of NOA based on the respected test method. As a result, we do not anticipate that special considerations for NOA will be required by El Dorado County. A copy of the results and chain of custody form are provided as attachments.

Summary

The site is considered feasible for the planned residential projects. In our opinion, no significant geotechnical engineering constraints are apparent. It will be necessary to provide additional geotechnical work for each site prior to its development (exploratory test pits, laboratory testing, analyses, etc.) in order to complete a final geotechnical engineering study. The geotechnical engineering study or studies should provide specific preliminary geotechnical recommendations pertaining to the design and construction of the earthwork, structures, and improvements associated with each individual site.

4.0 ANTICIPATED DESIGN CRITERIA

The following anticipated design criteria are intended to be used for cost estimation and planning purposes only and are based on our experience in the area and the preliminary testing programs completed as part of this report. Additional field and laboratory testing is needed to provide preliminary geotechnical recommendations for site preparation, grading, utility excavations, foundations, interior slab-on-grade floors and pedestrian flatwork, retaining walls, pavement sections, and drainage.

Seismic Criteria

Based on the 2019 California Building Code, Chapter 16, and our experience in the area, the following seismic parameters may be utilized for preliminary structural design.

Table 2: 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 (MCEC) PGA	0.164g
	Table 11.8-1	Site Coefficient F_{PGA}	1.236
	Equation 11.8-1	$PGA_M = F_{PGA}$ PGA	0.203g
2019 CBC	Figure 1613.2.1(1)	Short-Period MCE at 0.2s, S_S	0.387g
	Figure 1613.2.1(2)	1.0s Period MCE, S_1	0.202g
	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, $S_{MS} = F_aS_s$	0.503g
	Equation 16-37	Adjusted MCE Spectral Response Parameters, $S_{M1} = F_vS_1$	0.303g
	Equation 16-38	Design Spectral Acceleration Parameters, $S_{DS} = ⅔S_{MS}$	0.336g
	Equation 16-39	Design Spectral Acceleration Parameters, $S_{D1} = ⅔S_{M1}$	0.202g
	Table 1613.2.5(1)	Seismic Design Category (Short Period), Occupancy I to III	C
	Table 1613.2.5(1)	Seismic Design Category (Short Period), Occupancy IV	D
	Table 1613.2.5(2)	Seismic Design Category (1-Sec Period), Occupancy I to IV	D

Shallow Conventional Foundations

Shallow conventional foundation systems are anticipated to be suitable for construction of the proposed structures. An allowable dead plus live load bearing capacity of 2,500 psf is anticipated to be possible for preliminary design purposes. An allowable passive equivalent fluid pressure of 250 pcf and a coefficient of friction of 0.45 are anticipated for foundations.

A total settlement of less than 1 inch is anticipated; a differential settlement of 0.5 inches in 25 feet is anticipated where foundations are bearing on like materials. Where foundations will span from bearing on non-like materials such as engineered fill to bedrock, or vice versa, differential settlement may approach 0.75 inches in 25 feet. The settlement criteria are based on assumptions of foundation sizing and loading.

Conventional shallow foundations may be planned to be a minimum of 12 inches wide and founded a minimum of 18 inches below the lowest adjacent soil grade for buildings up to two-stories in height. Isolated pad (spread) footings should be a minimum of 24 inches square and founded a minimum of 18 inches below the lowest adjacent soil grade.

Retaining Walls

The table below presents the anticipated design criteria for retaining walls. In accordance with Section 1803.5.12.1 of the 2109 California Building Code, application of the seismic design values for earthquake loading are required for retaining walls supporting more than 6 feet of backfill. The values presented below are for conditions when engineered fill is used within the zone behind the wall defined as twice the height of the retaining wall.

Table 3: Retaining Wall Pressures

Wall Type	Wall Slope Configuration	Equivalent Fluid Weight (pcf)	Lateral Pressure Coefficient	Earthquake Loading (plf)**	
Free Cantilever	Flat	35	0.28	$3H^2$	Applied 0.6H above the base of the wall
	2H:1V	55	0.44	$13H^2$	
Restrained*	Flat	55	0.44		

* 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.

** Section 1803.5.12 of the 2019 California Building Code states that a determination of lateral pressures on basement and retaining walls due to earthquake loading shall be provided for structures to be designed in Seismic Design Categories D, E or F (Load value derived from Wood (1973) and modified by Whitman (1991)).

If keyed or interlocking, non-mortared walls such as Keystone, Basalite, Allen Block, or rockery walls are utlitized, the following soil parameters are anticipated to be applicable for design within on-site, native materials.

Table 4: Generalized Design Parameters

Internal Angle of Friction	Cohesion	Bulk Unit Weight	Seismic Coefficient, Kh
34°	0 psf	125 pcf	0.102g

Pavement Design

Asphalt Concrete Pavement Design

The pavement sections listed in the table below were based upon a soil resistance value, or "R-Value," of 35, and were calculated in accordance with the methods presented in the Sixth Edition of the California Department of Transportation Highway Design Manual.

Table 5: Asphalt Pavement Sections

Design Traffic Indices	Alternative Pavement Sections (Inches)	
	Asphalt Concrete *	Aggregate Base **
5.0	2.5 3.0	6.0 6.0
5.5	3.0 3.5	6.0 6.0
6.0	3.0 3.5	7.5 6.5
6.5	3.5 4.0	8.0 7.0
7.0	4.0 4.5	8.5 7.5
8.0	4.5 5.0	10.0 9.5

* 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

The pavement sections listed in the table below were based upon a soil resistance value, or "R-Value," of 35, and were calculated in accordance with the methods presented in the American Concrete Institute (ACI) Concrete Pavement Design (ACI 330R-08).

Table 6: Concrete Pavement Sections

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

5.0 CLOSURE

This report is valid for conditions as they exist at this time for planning the type of project described herein. Our intent was to assess the geotechnical feasibility in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project under similar conditions at this time. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client, as discussed in the "Purpose and Scope" section of this report. Application beyond the stated intent is strictly at the user's risk.

The preliminary opinions and conclusions of this feasibility report are based upon a site reconnaissance, review of available published and Youngdahl Consulting Group, Inc. own archival geotechnical data for the approximate project area, and our knowledge of the area. These opinions and conclusions should be confirmed and augmented by a geotechnical engineering study once the project reaches an appropriate stage.

APPENDIX A

Vicinity Map
Site Plan
Logs of Exploratory Test Pits
Soil Classification Chart and Log Explanation

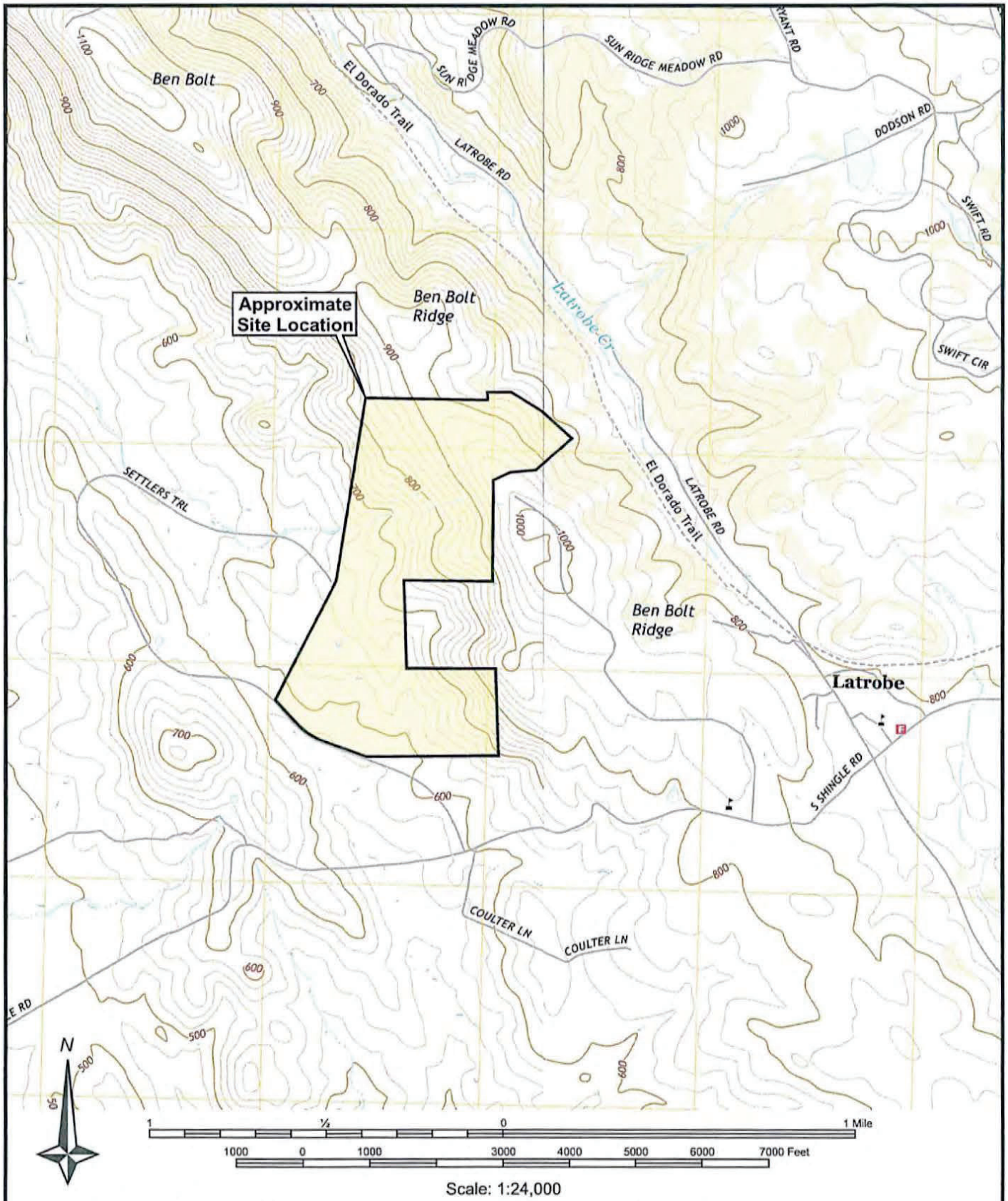
Introduction

The contents of this appendix shall be integrated with the geotechnical feasibility 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 field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 2 February 2022, which included the excavation of 14 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 305.5E mini 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.

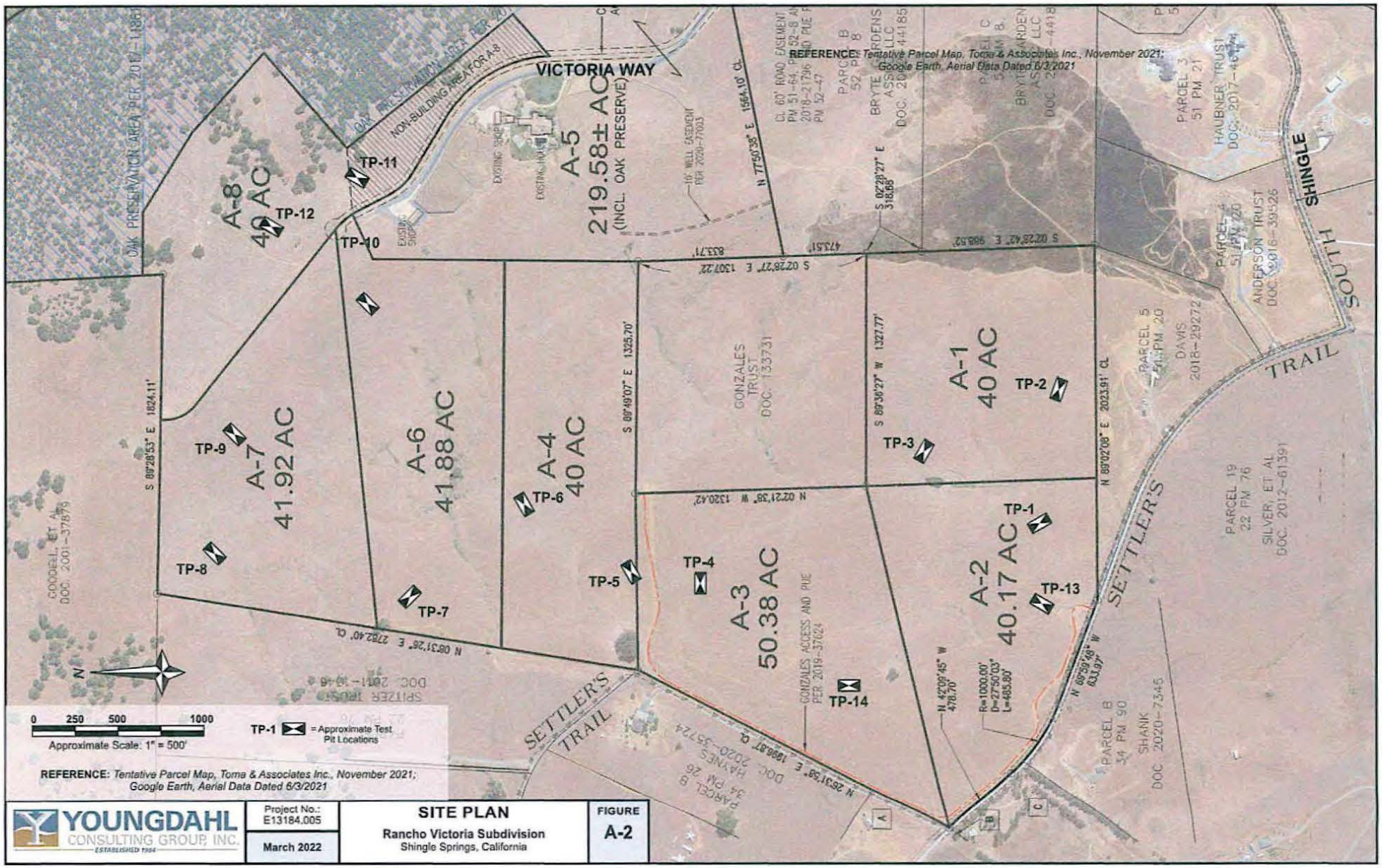
The soils encountered were logged during excavation and provide the basis for the "Logs of Test Pits", Figures A-3 through A-16, this Appendix. These logs show a graphic representation of the soil profile, the location, and depths at which samples were collected.



BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Latrobe & Folsom SE Quadrangles, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E13184.005 March 2022	**VICINITY MAP** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-1**

*Figure not OCR compatible.

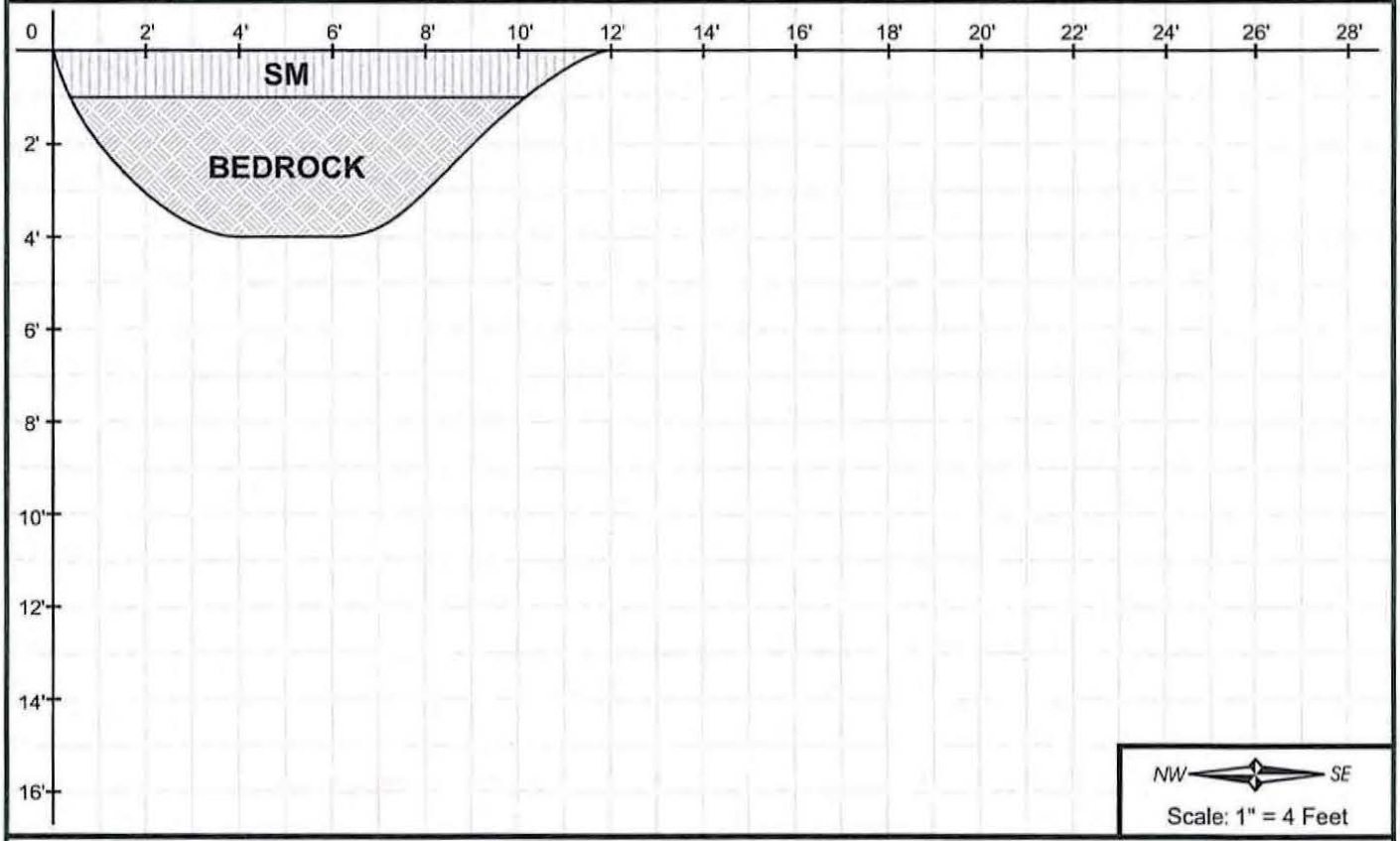


REFERENCE: *Tentative Parcel Map, Toma & Associates Inc., November 2021; Google Earth, Aerial Data Dated 6/3/2021*

YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E13184.005 March 2022	**SITE PLAN** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-2**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.558718° / W 121.007963°**		Pit No. **TP-1**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **330°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Red brown silty **SAND (SM)**, very dense, slightly moist		
@ 1' - 2'	Brown and green grey metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately soft		
@ 2' - 2.5'	*Grades brown and blue grey, moderately weathered*		
@ 2.5' - 4'	*Grades slightly weathered, hard*		
	Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted		

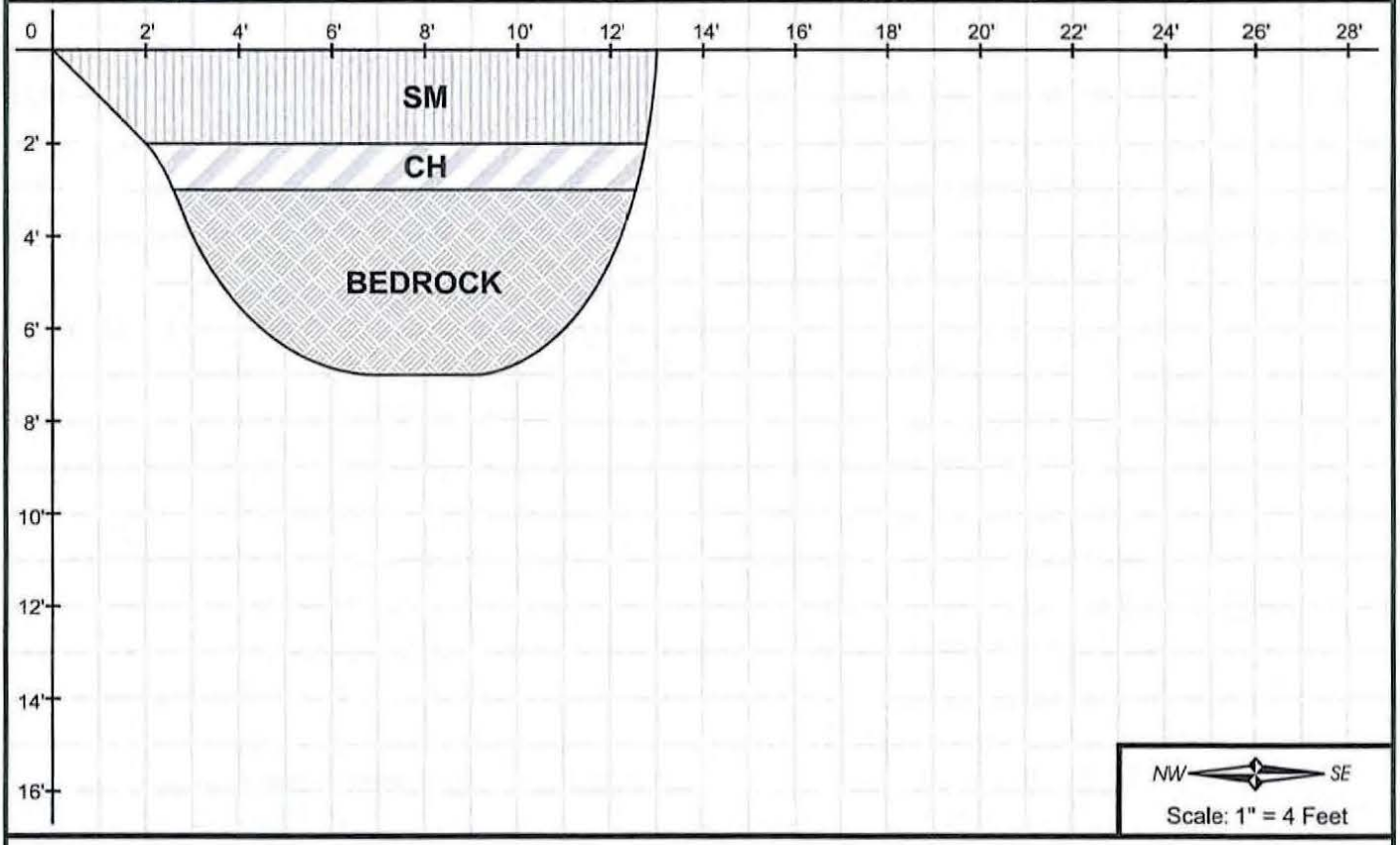


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-3**

Logged By: **FJS**	Date: **9 February 2022**	Lat / Lon: **N 38.558364° / W 121.005379°**		Pit No. **TP-2**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **280°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 2'*	Yellow brown sandy **SILT (ML)**, very stiff, slightly moist		
@ *2' - 4'*	Yellow brown sandy **CLAY (CH)** with trace gravel, high plasticity, hard, slightly moist	**TP-2** @ 2-3'	
@ *4' - 7'*	Olive yellow metavolcanic **BEDROCK**, completely weathered, soft, moist		
	Test pit terminated at 7' (practical refusal) No free groundwater encountered No caving noted		

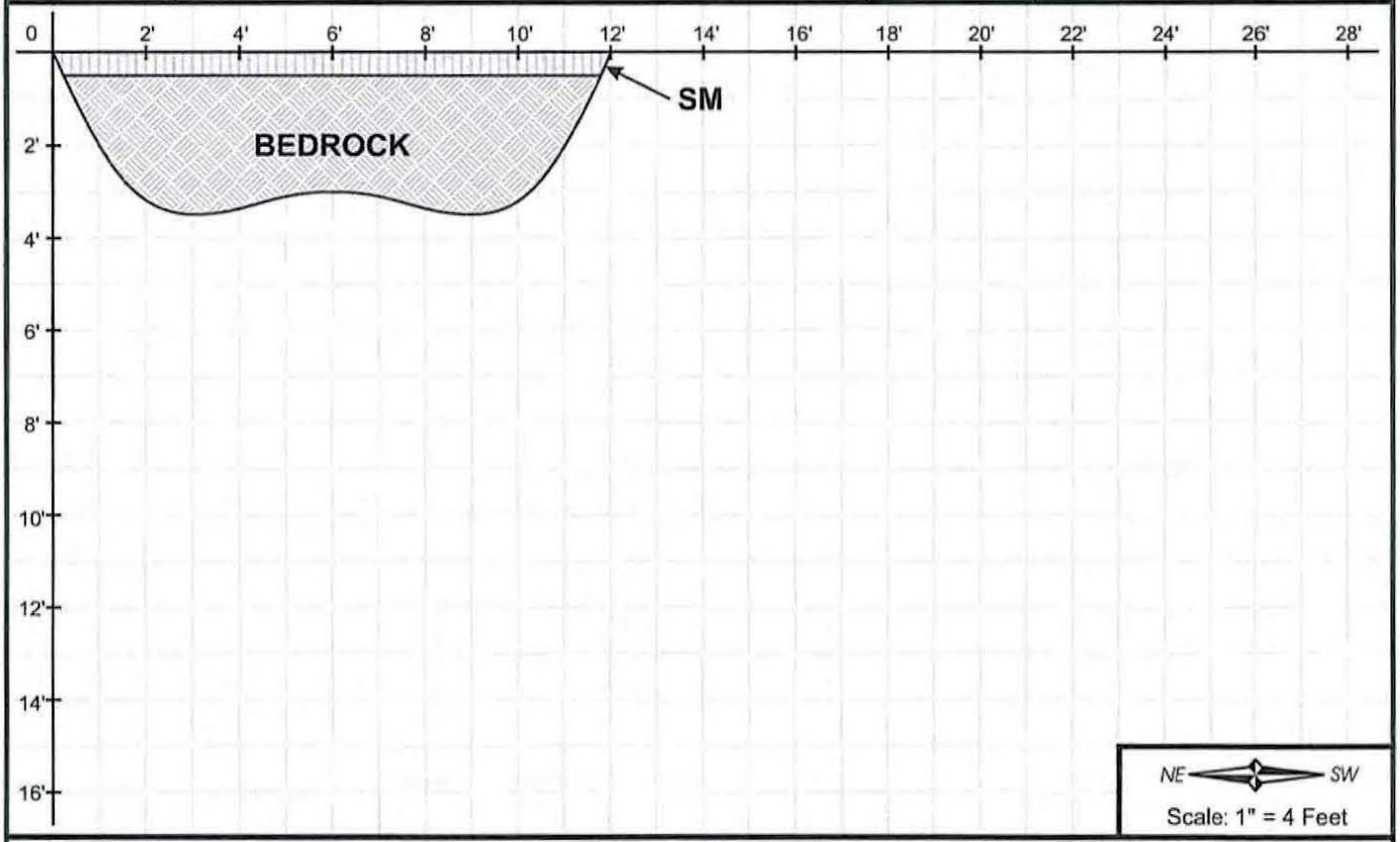


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-4**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.560447° / W 121.006549°**		Pit No. **TP-3**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **125°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 0.5'	Yellow brown silty **SAND (SM)** with gravel, dense, slightly moist		
@ 0.5' - 3.5'	Brown metavolcanic **BEDROCK**, highly weathered, closely fractured, soft, slightly moist		
@ 3.5'	*Grades moderately weathered, hard*		
	Test pit terminated at 3.5' (practical refusal) No free groundwater encountered No caving noted		

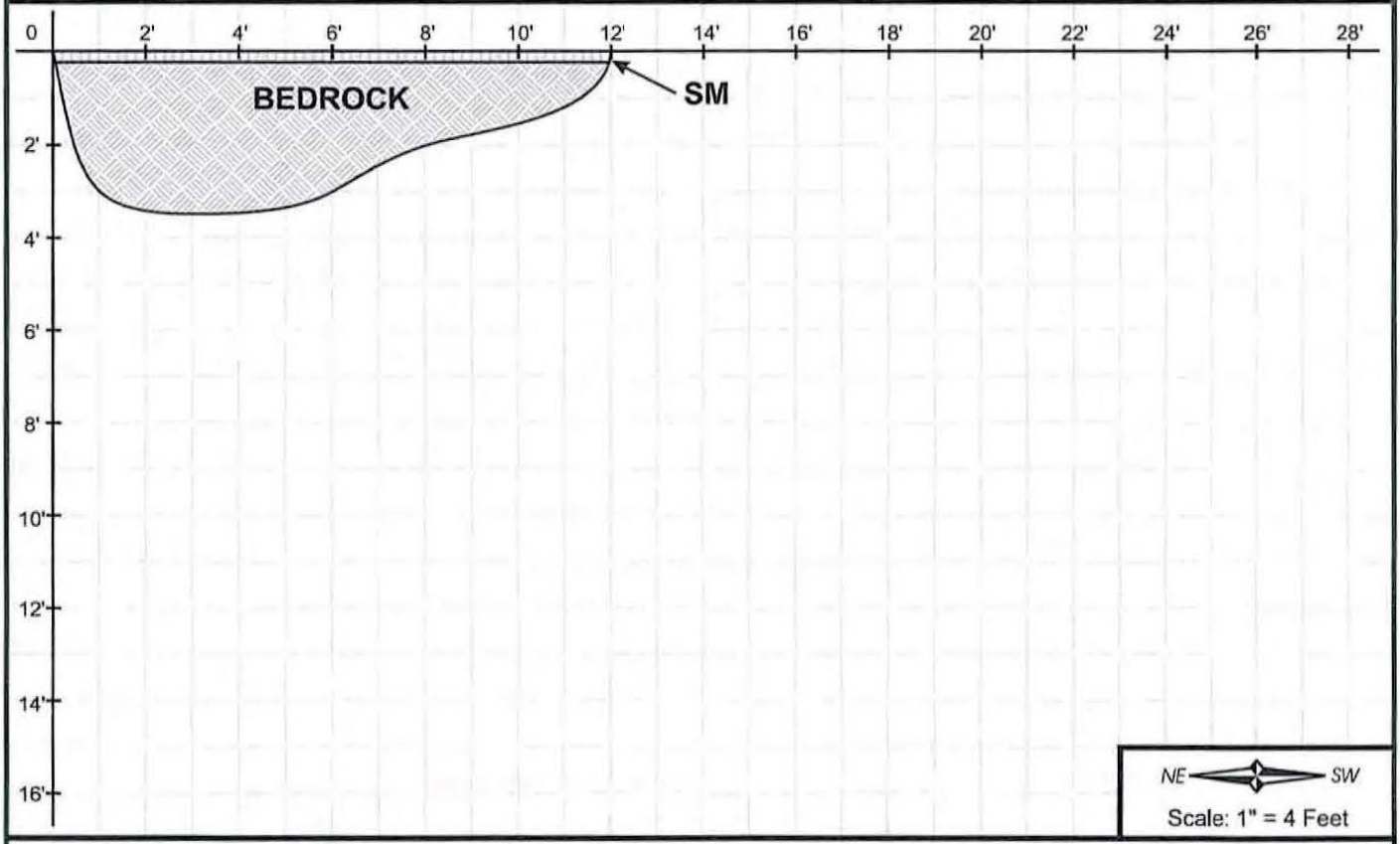


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-5**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.563828° / W 121.009288°**		Pit No. **TP-4**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **90°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 0.25'	Yellow brown silty **SAND (SM)** with gravel, dense, slightly moist	**TP-4** NOA	**Dip; Dip Direction** *71°; 150°* *54°; 200°* *66°; 205°* *86°; 327°*
@ 0.25' - 3.5'	Brown and olive yellow metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately soft to moderately hard		
@ 3.5'	*Grades hard*		
	Test pit terminated at 3.5' (practical refusal) No free groundwater encountered No caving noted		

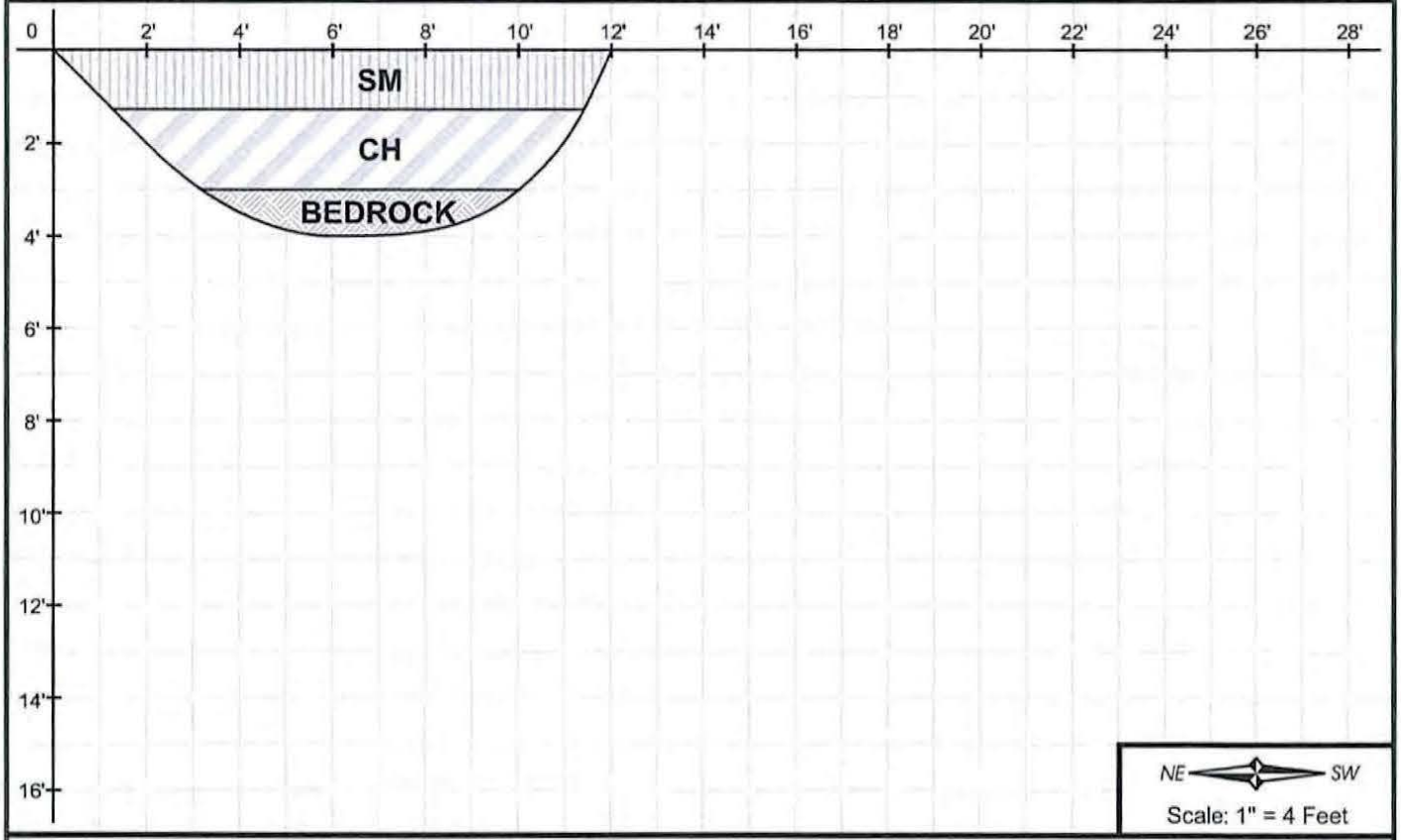


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-6**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.565110° / W 121.009042°**	Pit No. **TP-5**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **60°**	Elevation: ~

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1.25'	Yellow brown silty **SAND (SM)** with gravel, dense, slightly moist	**TP-5** @ 0-1.25'	
@ 1.25' - 2'	Olive yellow **CLAY (CH)**, hard, slightly moist		
@ 2' - 3'	Brown and yellow brown metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately soft, slightly moist		
@ 3' - 4'	*Grades moderately hard*		
@ 4'	*Grades hard*		
	Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted		

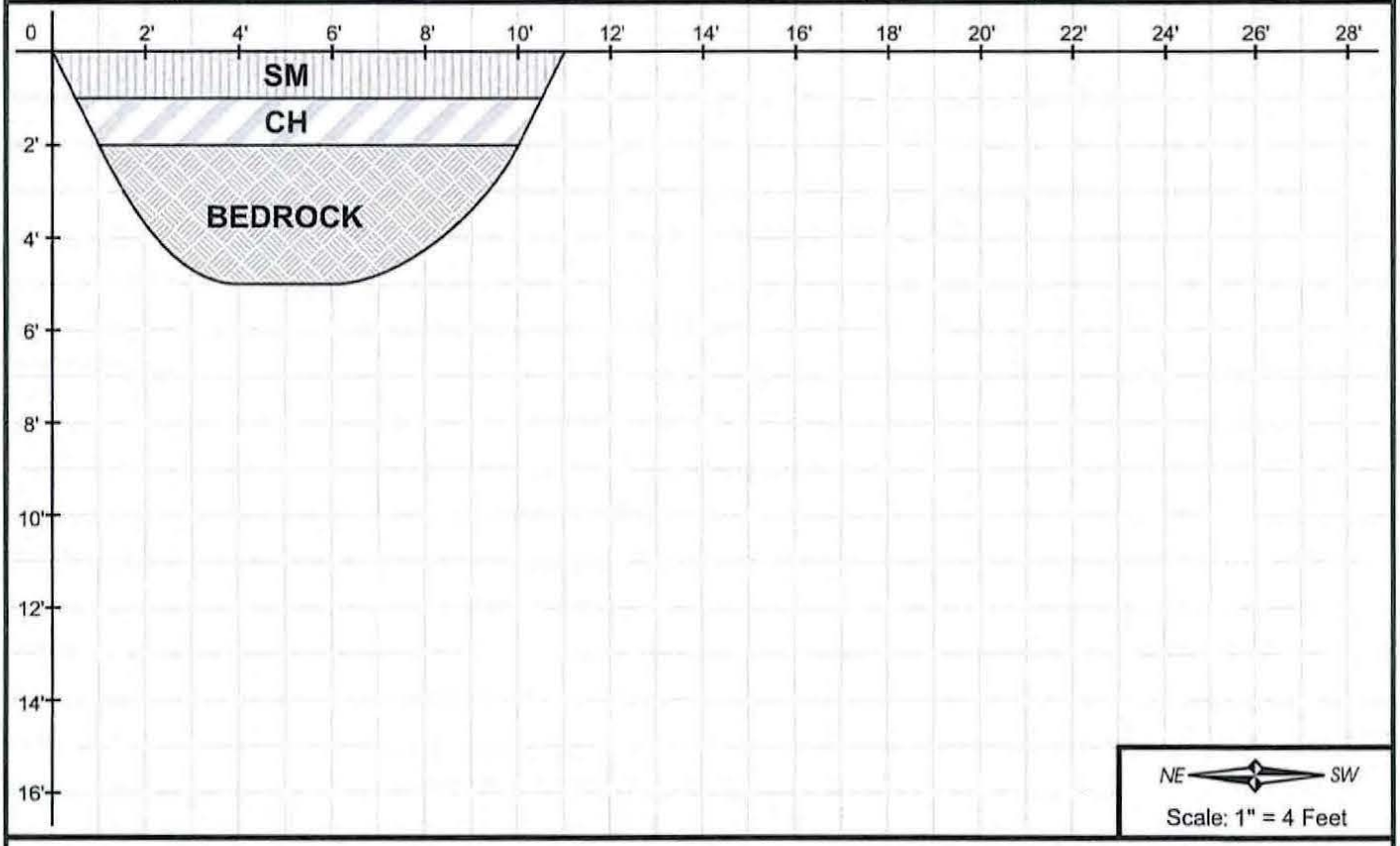


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-7**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.566672° / W 121.007645°**		Pit No. **TP-6**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **65°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Yellow brown silty **SAND (SM)** with gravel, dense, slightly moist		
@ 1' - 2'	Olive yellow sandy **CLAY (CH)**, very stiff, moist		
@ 2' - 4'	Brown and grey metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately hard, slightly moist		
@ 4' - 5'	*Grades moderately weathered, hard*		
	Test pit terminated at 5' (practical refusal) No free groundwater encountered No caving noted		

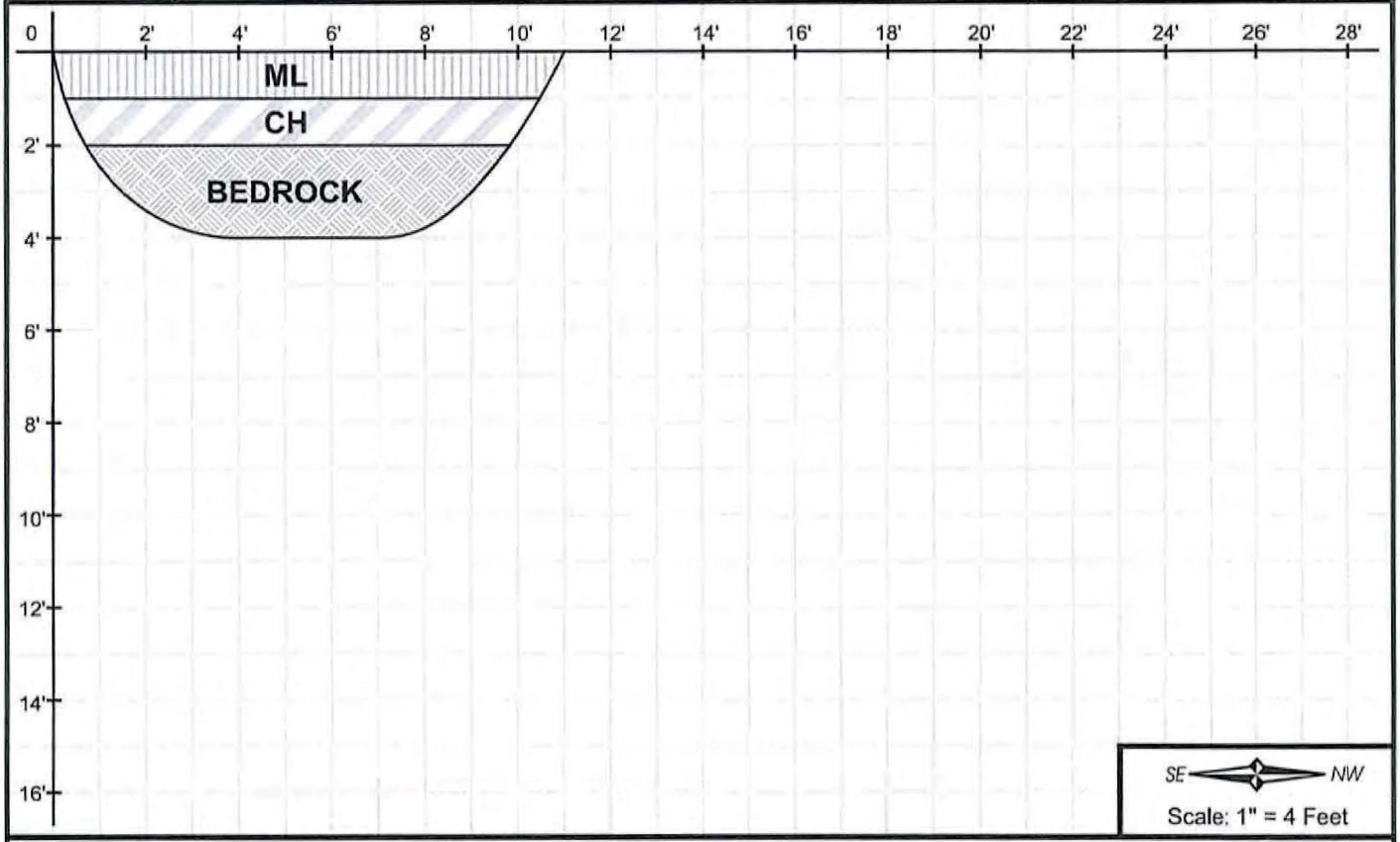


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-8**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.568526° / W 121.009562°**		Pit No. **TP-7**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **140°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 1'*	Yellow brown sandy **SILT (ML)** with gravel, stiff, slightly moist		
@ *1' - 2'*	Olive yellow **CLAY (CH)** with gravel, stiff, moist	**TP-7** @ 1-2'	
@ *2' - 4'*	Brown and grey metavolcanic **BEDROCK**, highly weathered, very closely to closely fractured, moderately hard, slightly moist		
@ *4'*	*Grades blue grey, hard*		
	Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted		

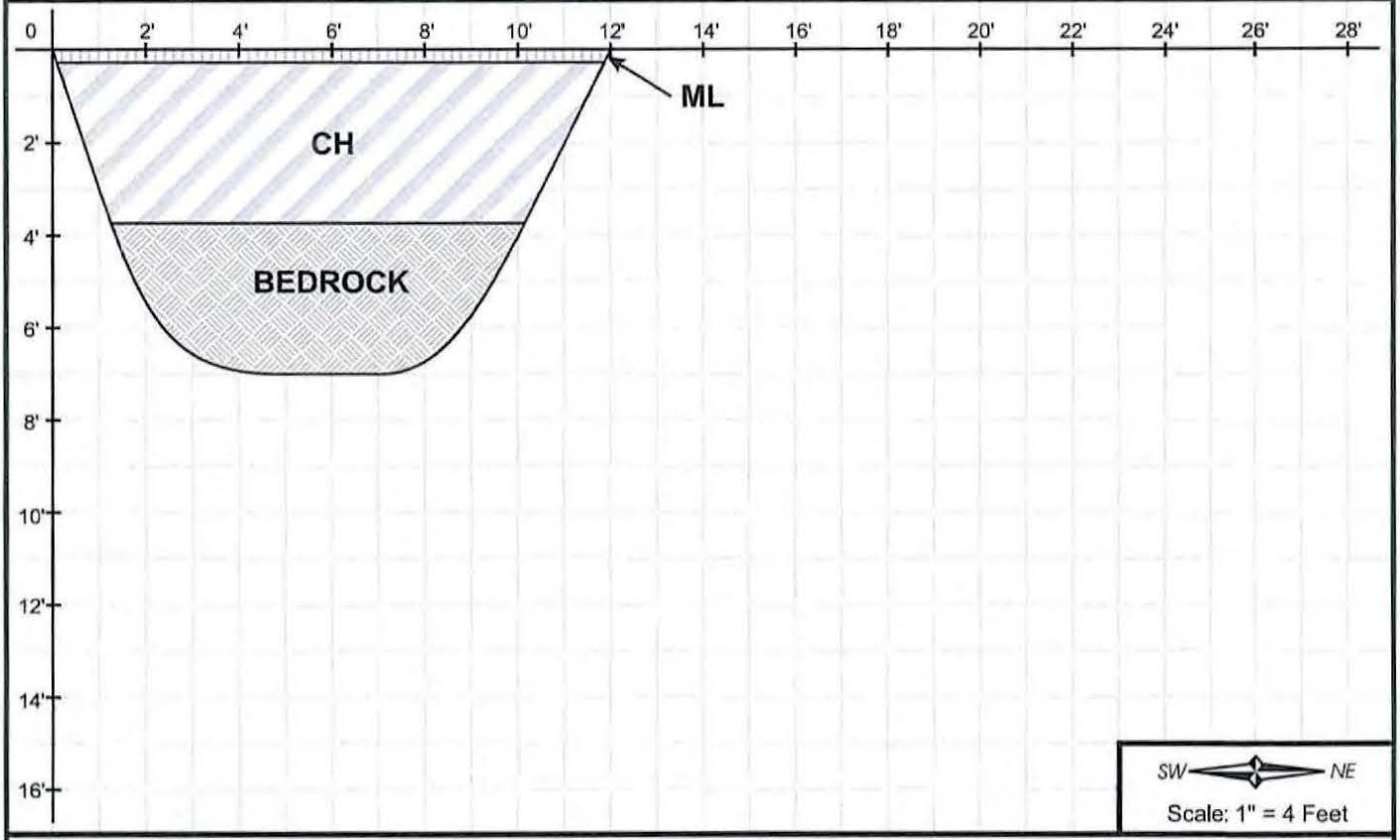


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	**FIGURE A-9**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.571555° / W 121.008642°**	Pit No. **TP-8**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **220°**	Elevation: ~

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 0.25'*	Brown sandy **SILT (ML)**, stiff, slightly moist		
@ *0.25'-3.75'*	Olive yellow **CLAY (CH)** with sand, hard, moist	**TP-8** @ 1-3'	
@ *3.75' - 4.5'*	Olive yellow metavolcanic **BEDROCK**, completely weathered, soft, slightly moist	**TP-8** NOA	
@ *4.5' - 7'*	*Grades moderately soft*		
@ *7'*	*Grades olive yellow and grey, moderately to slightly weathered, hard*		
	Test pit terminated at 7' (practical refusal) No free groundwater encountered No caving noted		

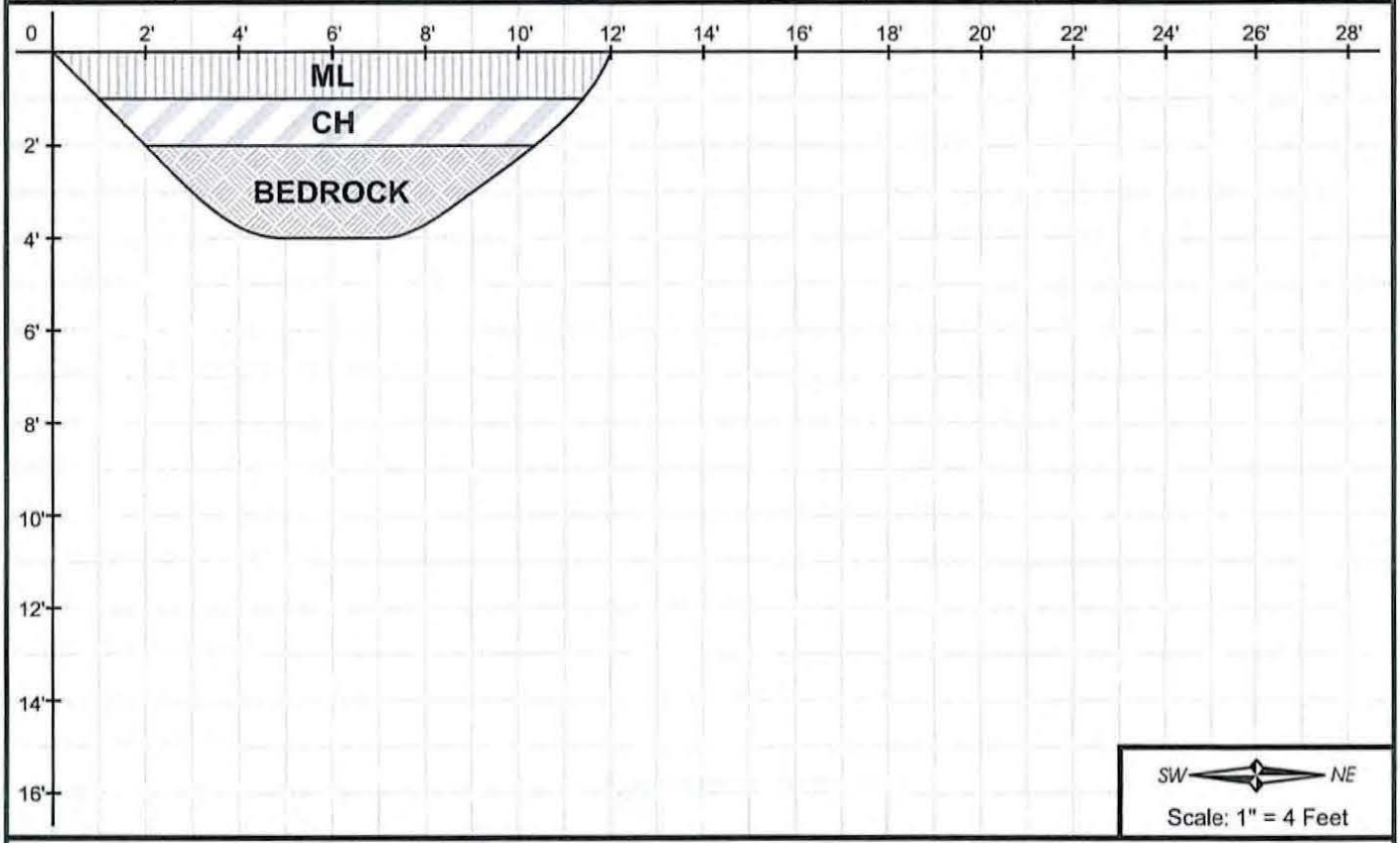


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-10**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.571287° / W 121.006184°**		Pit No. **TP-9**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **230°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Yellow brown sandy **SILT (ML)**, stiff, slightly moist		
@ 1' - 2'	Brown sandy **CLAY (CH)** with gravel, stiff, moist		
@ 2' - 4'	Brown and blue grey metavolcanic **BEDROCK**, highly to slightly weathered, closely fractured, moderately soft to hard, slightly moist		
	Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted		

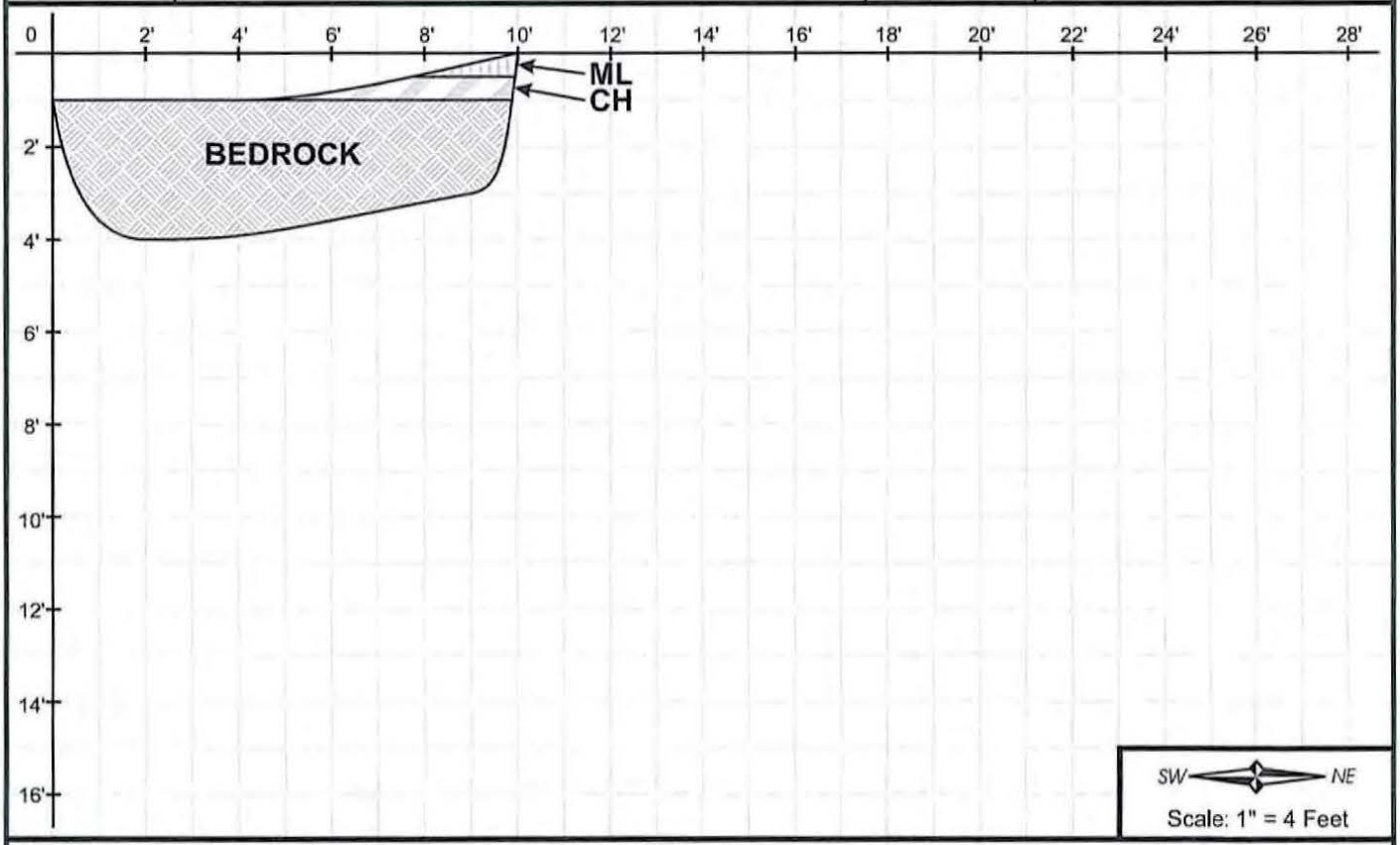


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	**FIGURE A-11**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.569077° / W 121.003624°**	Pit No. **TP-10**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **230°** Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 0.5'*	Yellow brown sandy **SILT (ML)**, stiff, slightly moist		
@ *0.5' - 1'*	Olive yellow sandy **CLAY (CH)**, stiff, moist		
@ *1' - 3.5'*	Olive yellow metavolcanic **BEDROCK**, completely weathered, soft, slightly moist		
@ *3.5'*	*Grades blue grey, slightly weathered, hard*		
	Test pit terminated at 3.5' (practical refusal) No free groundwater encountered No caving noted		

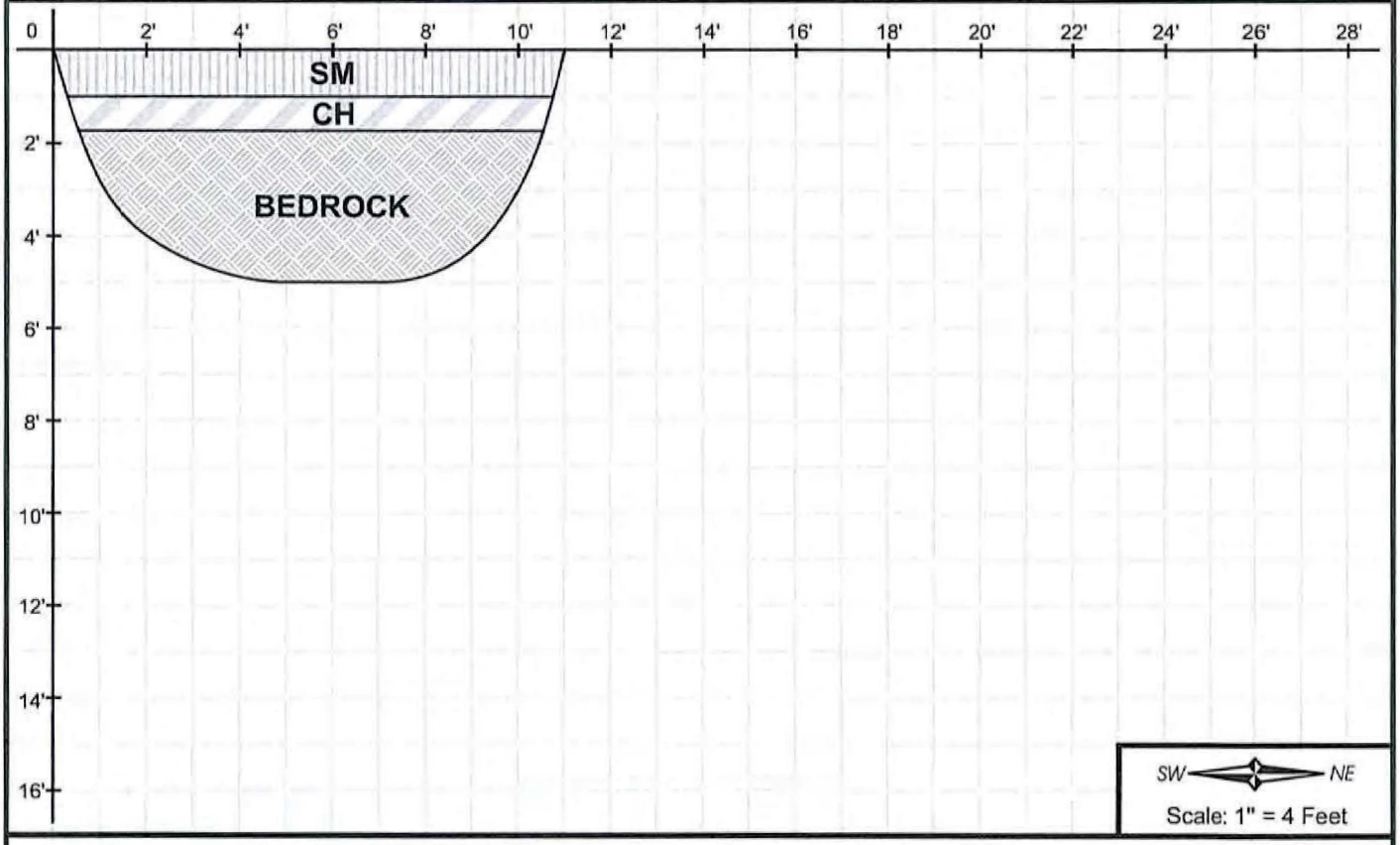


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-12**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.569330° / W 121.001067°**		Pit No. **TP-11**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **210°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 1'	Brown silty **SAND (SM)** with gravel, dense, slightly moist		
@ 1' - 1.75'	Olive yellow sandy **CLAY (CH)** with gravel, very stiff, moist		
@ 1.75' - 3'	Brown metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately hard		
@ 3' - 5'	*Grades brown and grey, moderately to slightly weathered*		
	Test pit terminated at 5' (practical refusal) No free groundwater encountered No caving noted		

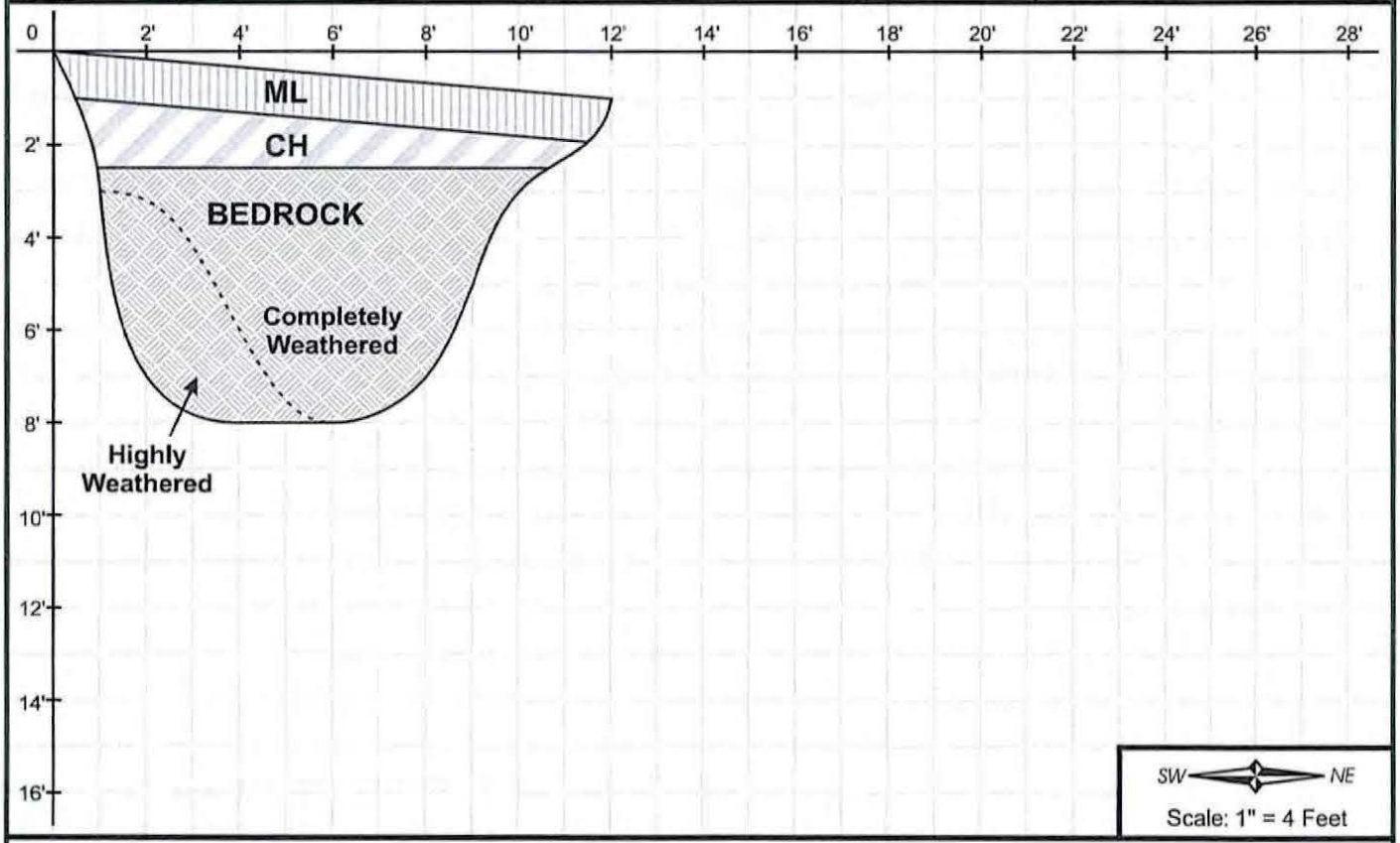


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	**FIGURE A-13**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.570711° / W 121.002103°**		Pit No. **TP-12**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **205°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 1'*	Yellow brown sandy **SILT (ML)** with gravel, very stiff, slightly slightly moist		
@ *1' - 2.5'*	Olive yellow sandy **CLAY (CH)** with gravel, very stiff, moist		
@ *2.5' - 8'*	Olive yellow metavolcanic **BEDROCK**, completely weathered, soft, slightly moist		
@ *3' - 8'*	*Grades highly weathered, closely fractured, moderately soft*		
	Test pit terminated at 8' No free groundwater encountered No caving noted		

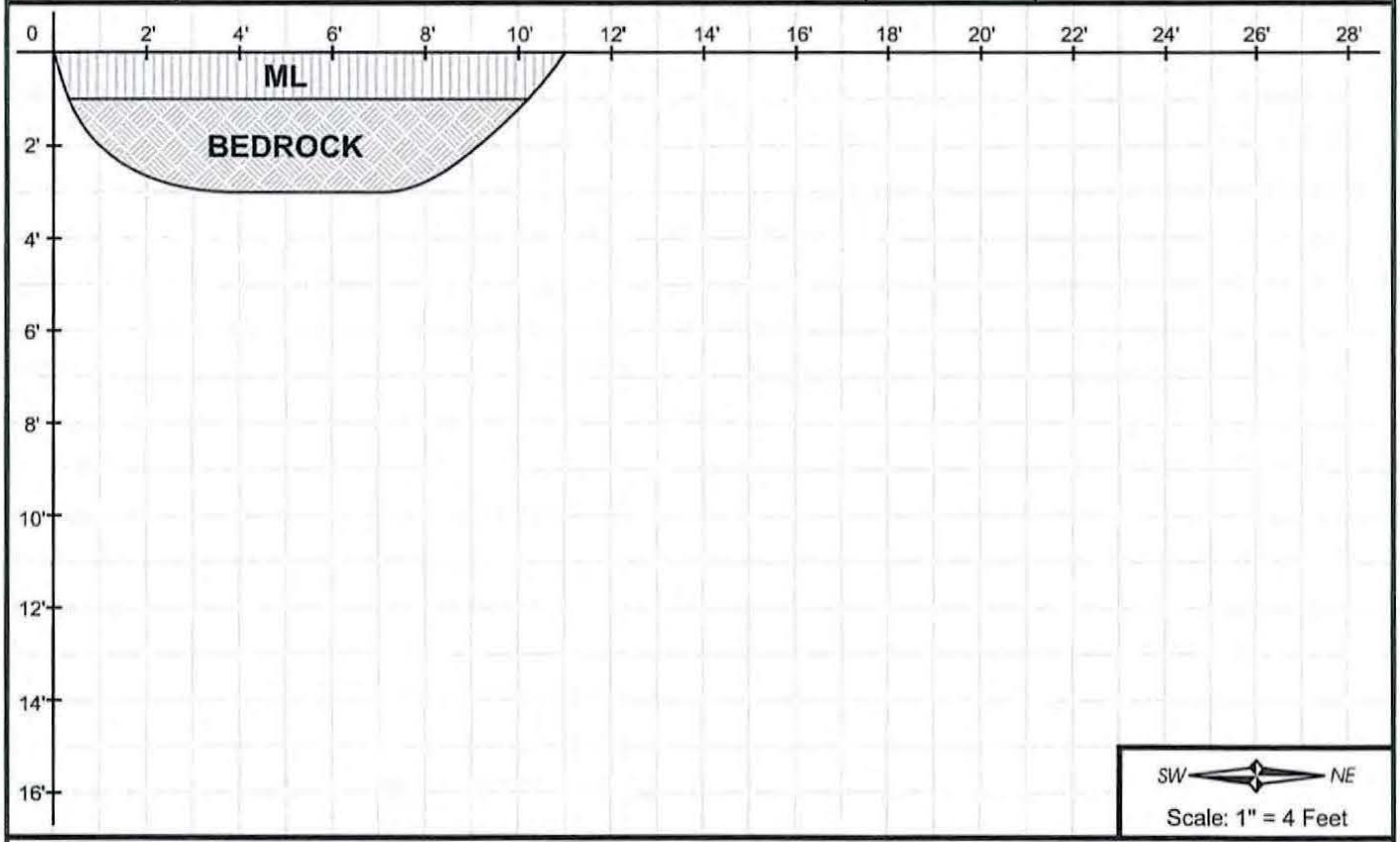


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-14**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.558636° / W 121.009615°**		Pit No. **TP-13**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **210°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ *0' - 1'*	Yellow brown sandy **SILT (ML)**, very stiff, slightly slightly moist	**TP-13** @ 0-1'	
@ *1' - 2'*	Yellow brown and light brown grey metavolcanic **BEDROCK**, completely weathered, soft, slightly moist		
@ *2' - 3'*	*Grades highly weathered, closely fractured, moderately soft*		
@ *3'*	*Grades moderately weathered, hard*		
	Test pit terminated at 3' (practical refusal) No free groundwater encountered No caving noted		

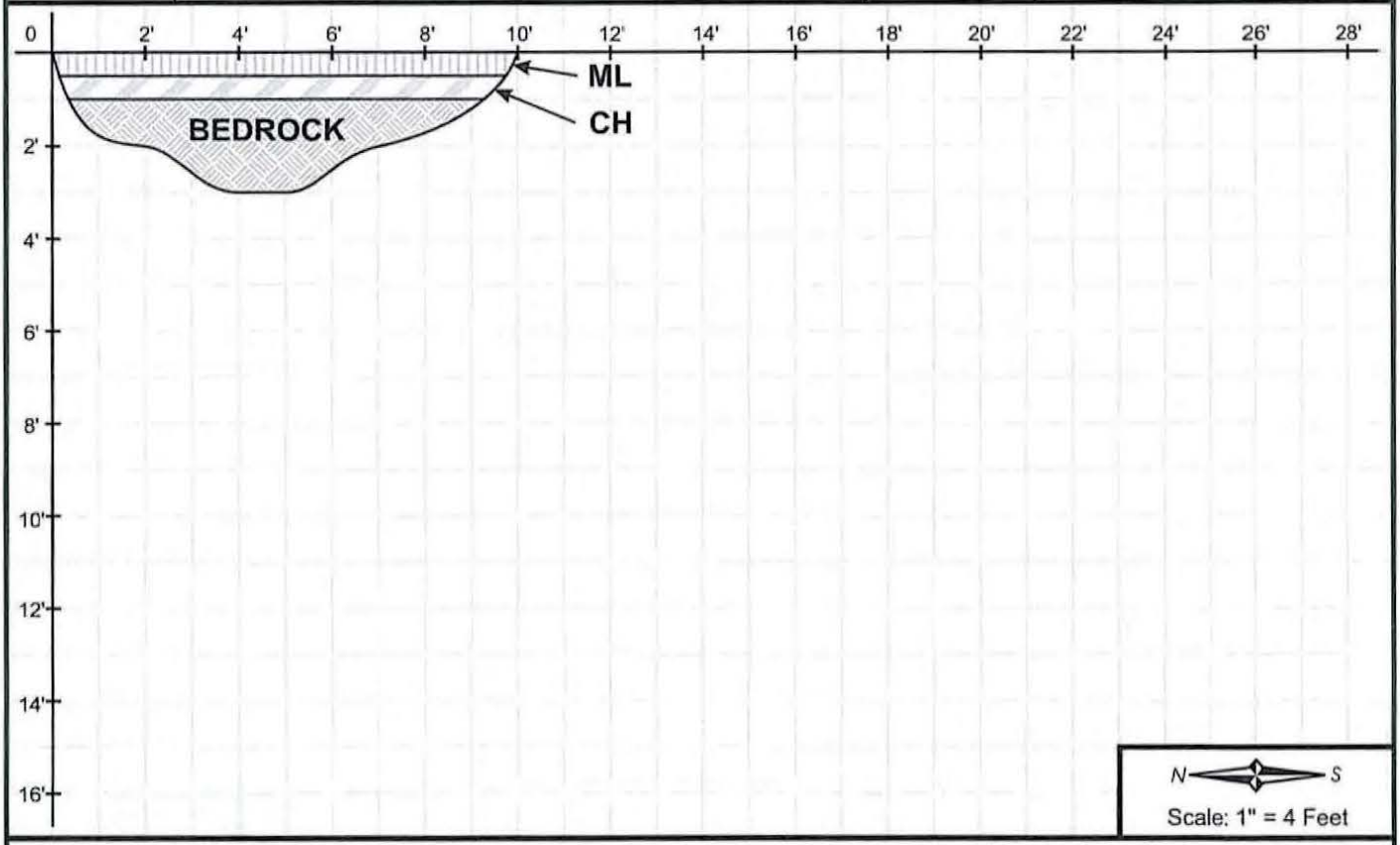


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at 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.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	**FIGURE A-15**

Logged By: **FJS**	Date: **2 February 2022**	Lat / Lon: **N 38.561583° / W 121.011260°**		Pit No. **TP-14**
Equipment: **CAT 305.5E with 24" Bucket**		Pit Orientation: **0°**	Elevation: ~	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0' - 0.5'	Yellow brown sandy **SILT (ML)**, very stiff, slightly moist		
@ 0.5' - 1'	Brown sandy **CLAY (CH)** with gravel, stiff, moist		
@ 1' - 3'	Brown metavolcanic **BEDROCK**, highly weathered, closely fractured, moderately hard, slightly moist		
@ 3'	*Grades hard*		
	Test pit terminated at 3' (practical refusal) 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.

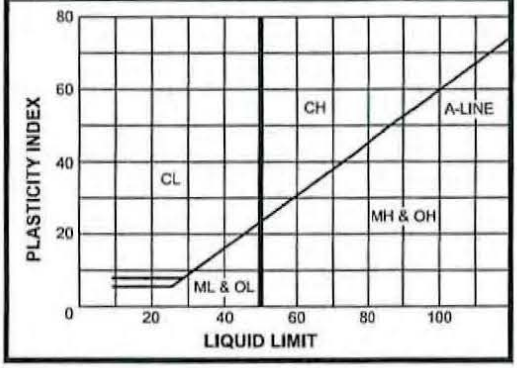
YOUNGDAHL CONSULTING GROUP, INC. ESTABLISHED 1984	Project No.: E13184.005 **March 2022**	**EXPLORATORY TEST PIT LOG** **Rancho Victoria Subdivision** Shingle Springs, California	FIGURE **A-16**

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.: E13184.005

March 2022

SOIL CLASSIFICATION CHART AND LOG EXPLANATION
Rancho Victoria Subdivision
Shingle Springs, California

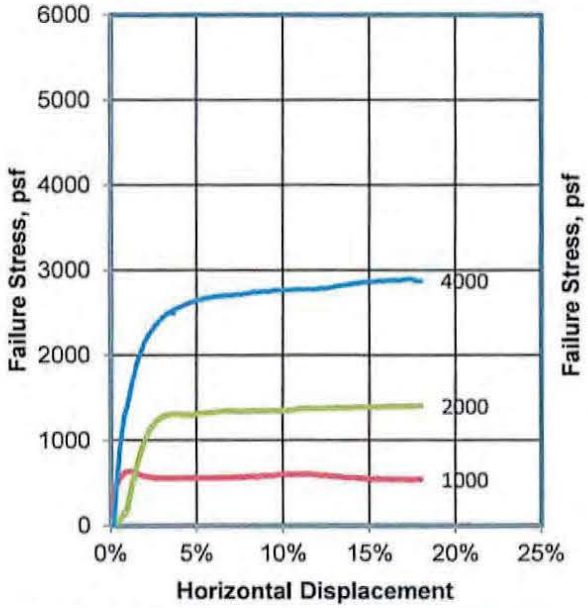
FIGURE **A-17**

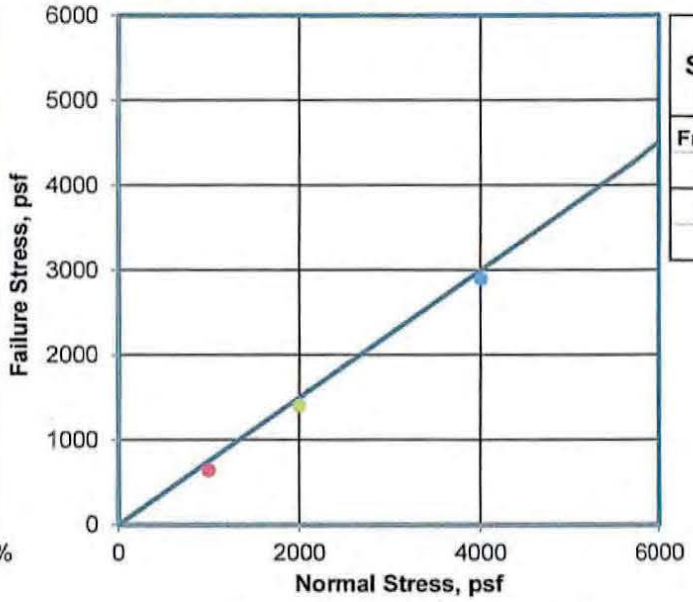
APPENDIX B

Laboratory Testing

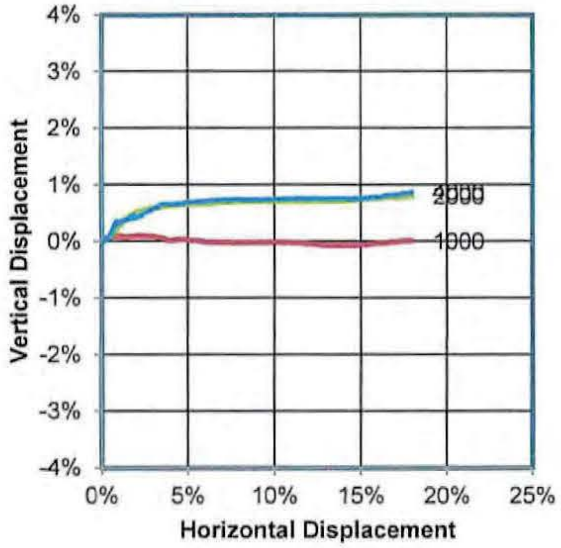
Direct Shear Test
Modified Proctor Test
R-Value Test
Expansion Index Test
CARB 435 NOA Tests

Direct Shear Test of Soils Under Consolidated Drained Conditions, ASTM D3080





Direct Shearbox Results	
Friction Angle	36.9°
Cohesion	0 psf



Test No.		1	2	3
Initial	Wet Density, pcf	125.4	125.4	125.4
	Dry Density, pcf	112.4	112.4	112.4
	Moisture Content, %	11.6	11.6	11.6
	Diameter, in	2.50	2.50	2.50
	Height, in	1.00	1.00	1.00
Pre Shear	Wet Density, pcf	139.0	143.0	143.6
	Dry Density, pcf	113.8	116.2	117.5
	Moisture Content, %*	22.2	23.1	22.2
	Diameter, in	2.50	2.50	2.50
	Height, in	0.99	0.97	0.96
Normal Stress, psf		1000	2000	4000
Failure Stress, psf		642	1409	2901
Failure Strain, %		1.13	17.95	17.34
Rate, in/min			0.002	

*Based on post shear moisture content

Sample Type: Remolded to 90% RC

Material Description: **Red Brown Silty SAND with Gravel**

Source: Curve 1

Notes: Gravel removed from test sample.

Sample No./Depth:	TP-13 @ 0-1'			USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	2/2/2022	Date Test Started:	2/28/2022				6	

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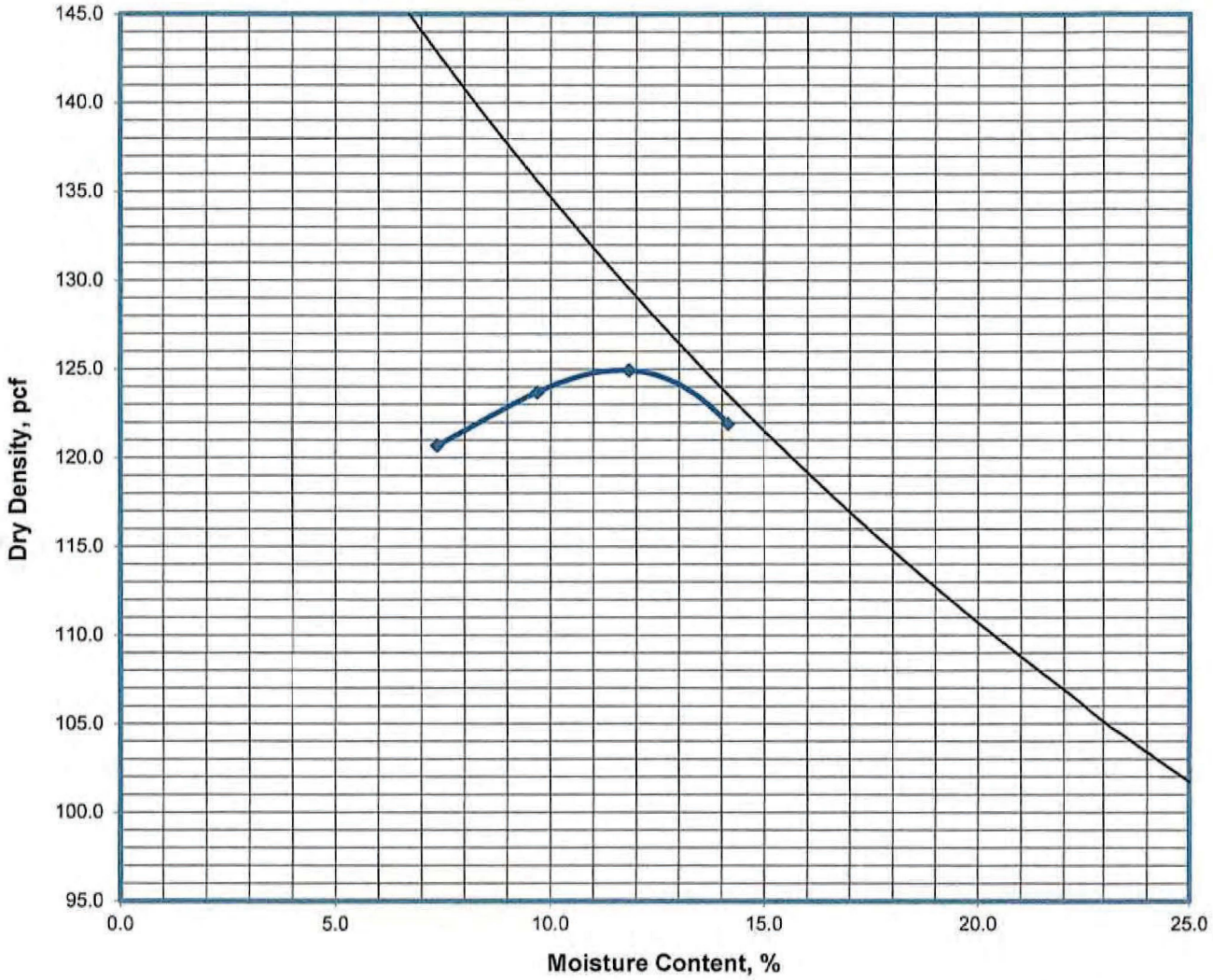
Project: **Rancho Victoria Subdivision**

Project No.: **E13184.005**

Figure B-1

Reviewed By: DN Date: 3/2/2022

Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 lf-lbf/ft3), ASTM D1557, Method A



Maximum Dry Density, pcf:	**124.9**	Optimum Moisture Content, %:	**11.6**
Material Description:	**Brown Silty SAND with Gravel**		
Source:	TP-13 @ 0-1'		
Notes:			

Sample No./Depth:	Curve 1			USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4 :	% Less than No. 200
Date Sampled:	2/2/2022	Date Test Started:	2/8/2022				6	

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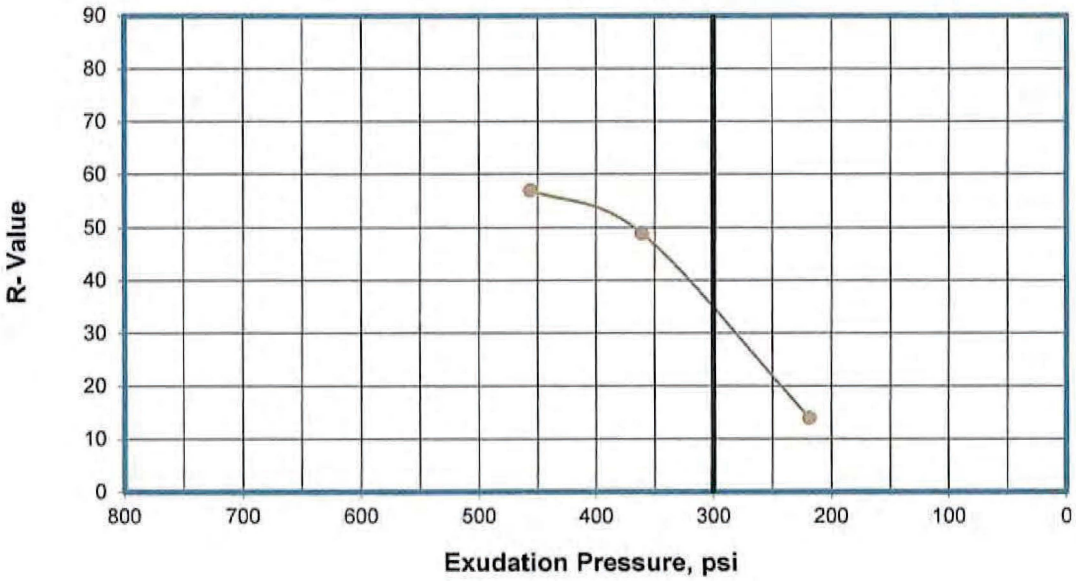
Project:	**Rancho Victoria Subdivision**		
Project No.:	**E13184.005**		Figure
Reviewed By:	JGR	Date: 2/9/2022	**B-2**

Resistance "R" Value of Soil and Soil-Aggregate Mixtures, CTM 301

R- Value Chart



Test Specimen No.:	1	2	3
Moisture Content at Test, %	12.7	13.8	16.1
Dry Density at Test, pcf	123.9	123.7	117.1
Expansion Pressure, psf	546	186	26
Exudation Pressure, psi	456	361	219
Resistance "R" Value	57	49	14
"R" Value at 300 psi Exudation Pressure			**35**

Material Description: **Brown Sandy SILT with trace Gravel**

Source:

Notes:

Sample No./Depth:	TP-13 @ 0-1'			USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	2/2/2022	Date Test Started:	2/9/2022				4	

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Project: **Rancho Victoria Subdivision**

Project No.: **E13184.005**

Figure **B-3**

Reviewed By: JLC Date: 2/11/2022

Expansion Index of Soils, ASTM D4829

Test Results

Expansion Index	154
Dry Density, as molded, pcf	91.0
Moisture Content, as molded, %	16.0
Final Moisture Content, %	39.9
Initial Saturation, as molded, %	50.8

Classification of Potentially Expansive Soil

Expansion Index, EI	Potential Expansion
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
Above 130	Very High

Material Description: **Olive Yellow Clay with Sand**

Source:

Notes:

Sample No./Depth:	TP-8 @ 1-3'			USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled:	2/2/2022	Date Test Started:	2/11/2022				0	

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ph 916.933.0633 ▪ fx 916.933.6482 ▪ www.youngdahl.net

Project: **Rancho Victoria Subdivision**

Project No.: **E13184.005**

Figure **B-4**

Reviewed By: Date:

OrderID: 092202138

EMSL ANALYTICAL, INC.
TESTING LABS • PRODUCTS • TRAINING

Asbestos Chain of Custody (Air, Bulk, Soil)
California Customers

EMSL Analytical, Inc.

EMSL Order Number / Lab Use Only: #092202138

PHONE:
EMAIL:

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	Youngdahl Consulting Group, Inc.	Company Name:	
Contact Name:	Francisco Saldana	Billing Contact:	
Street Address:	1234 Glenhaven Court	Street Address:	
City, State, Zip:	El Dorado Hills, CA 95762	Country: USA	City, State, Zip: / Country:
Phone:	831.710.7313		Phone:
Email(s) for Report:	fjs@youngdahl.net; kjm@youngdahl.net		Email(s) for Invoice:

Project Information

Project Name/No: Rancho Victoria Subdivision
Purchase Order: E13184.005
EMSL LIMS Project ID: (If applicable, EMSL will provide)
US State where samples collected: CA
State of Connecticut (CT) must select project location: ☐ Commercial (Taxable) ☐ Residential (Non-Taxable)
Sampled By Name: Francisco Saldana
Sampled By Signature:
No. of Samples in Shipment:

Turn-Around-Time (TAT)

☐ 3 Hour ☐ 4-4.5 Hour AHERA ONLY ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☑ 1 Week ☐ 2 Week

TEM Air - 6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.

Test Selection

PCM Air
- ☐ NIOSH 7400
- ☐ NIOSH 7400 w/ 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)
- ☐ POINT COUNT
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%) ☐ 1,200 (<0.08%)
- POINT COUNT w/ GRAVIMETRIC
  - ☐ 400 (<0.25%) ☐ 1,000 (<0.1%) ☐ 1,200 (<0.08%)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ CARB Modified AHERA
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312*

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%)

TEM - Settled Dust
- ☐ Microvac - ASTM D5755
- ☐ Wipe - ASTM D6480
- ☐ Qualitative via Filtration Prep
- ☐ Qualitative via Drop Mount Prep

Soil - Rock - Vermiculite (reporting limit)*
- ☑ PLM CARB 435 - Level A (<0.25%)
- ☐ PLM CARB 435 - Level B (<0.1%)
- ☐ TEM CARB 435 - Level B (<0.1%)
- ☐ TEM CARB 435 - Level C (<0.01%)
- ☐ CARB Guidance Compliance Prep
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
- ☐ PLM EPA 600/R-93/116 with milling prep (<0.1%)
- ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)

Other

*Please call with your project-specific requirements.

☐ Positive Stop - Clearly Identified Homogeneous Areas (HA) | Filter Pore Size (Air Samples) ☐ 0.8um ☐ 0.45um

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
TP-1	Composite Samples from Test Pit		
TP-8	↓		

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by: Francisco Saldana	Date/Time: 2/2/22 5:30pm	Received by: ZA 2/4/22	Date/Time: 9:15am FX
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - COC-51 Asbestos CA Clients R3 03/24/2021

☒ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

EMSL Analytical, Inc.
464 McCormick Street San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 092202138
Customer ID: YOUN22
Customer PO: E13184.005
Project ID:

Attention: Francisco Saldana
Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762

Phone: (916) 933-0633
Fax: (916) 933-6482
Received: 02/04/2022 9:15 AM
Analysis Date: 02/10/2022
Collected:

Project: RANCHO VICTORIA SUBDIVISION - E13184.005

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
TP-4 *092202138-0001*	COMPOSITE SAMPLES FROM TEST PIT	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
TP-8 *092202138-0002*	COMPOSITE SAMPLES FROM TEST PIT	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

Analyst(s)
Gavin Lee (2)

Cecilia Yu, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. EMSL suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from: 02/10/2022 15:48:06

APPENDIX G

ON-SITE SEWAGE DISPOSAL STUDY

ONSITE SEWAGE DISPOSAL STUDY FOR THE PROPOSED RANCHO VICTORIA SUBDIVISION

Prepared for:
JTS Communities, Inc.
401 Watt Avenue
Sacramento, California 95864

December 13, 2007

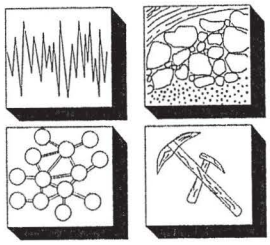
RECEIVED
JAN 03 2008
EL DORADO COUNTY
DEVELOPMENT SERVICES DEPT

Prepared by:
William T. Mitchell II, P.G.
WHEELDON GEOLOGY
420 Placerville Drive
Placerville, CA 95667
(530) 621-4482

WHEELDON GEOLOGY

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667
530-621-4482 • FAX 530-621-4481



8 December 2007

Rob Aragon
JTS Communities, Inc.
401 Watt Avenue
Sacramento, CA 95864

RE: **ONSITE SEWAGE DISPOSAL STUDY FOR THE PROPOSED RANCHO VICTORIA SUBDIVISION, ELDORADO COUNTY, CALIFORNIA**

Dear Mr. Aragon:

During the month of September 2007, WHEELDON GEOLOGY was contacted and asked to conduct an evaluation of each of the proposed parcels at the Rancho Victoria Subdivision to satisfy the minimum requirements for onsite sewage disposal capability.

Purpose of the Report

The purpose of this report is to provide the project engineer with basic information pertaining to onsite sewage disposal conditions within this proposed subdivision. This report supplies information on these parcels as required in the *El Dorado County Interim Guidelines for Tentative Parcel Maps and Subdivisions, July 27, 2007.*

Location and Access

The proposed Rancho Victoria project covers approximately 800 acres mostly north of South Shingle Road and west of Latrobe Road in Latrobe, El Dorado County, California.

Field Work

Most soil test trench information for this summary on this project was completed during the months of September and October 2007. Three lots were trenched in October 2004.

WASTEWATER DISPOSAL SYSTEM DESIGN RECOMMENDATIONS

Soil test trenches were excavated on all proposed new lots. Percolation test were conducted on lots were soil test trenches inspections indicated possible slow permeability.

This data is summarized in the attached tables: Soil Test Trench Inspections, Percolation Test Data and Test Trench Coordinates.

Percolation test data indicate that wastewater disposal system infiltration fields and replacement areas can be designed on the proposed lots within the project boundary.

Field test data and individual site evaluations indicate that the proposed lots have adequate soil conditions (demonstrated soil depths of at least 7.5 feet) for installation of standard septic tank infiltration trench systems. The available disposal areas are shown as a 12,000 square foot area, minimum requirements for an on-site sewage disposal system as shown on the attached Plate: Onsite Sewage Disposal, Tentative Subdivision Map and Development Plan.

Field test data indicate that depth to groundwater within the on-site wastewater disposal area will be in excess of 7.5 feet. Groundwater will be protected from contamination from wastewater disposal within this subdivision by a combination of the weathering of surface rocks, which has produced silty and clayey loams with abundant interstitial clays, and adherence to the setbacks required by the local Division of Environmental Health and the California Regional Water Quality Control Board at this time.

Wheeldon Geology has completed this Onsite Sewage Disposal Study in a manner consistent with the level of care and skill ordinarily exercised by members of the professional currently practicing in the same locality under similar conditions. The information contained in this report reflects the site conditions and disposal areas available at the time of the investigation according to the current development plan. Site conditions may change with the passage of time due to the works of man or natural events. Changes beyond our control may render this report invalid in part, or wholly.

If you have any questions regarding information in this report, please feel free to contact me.

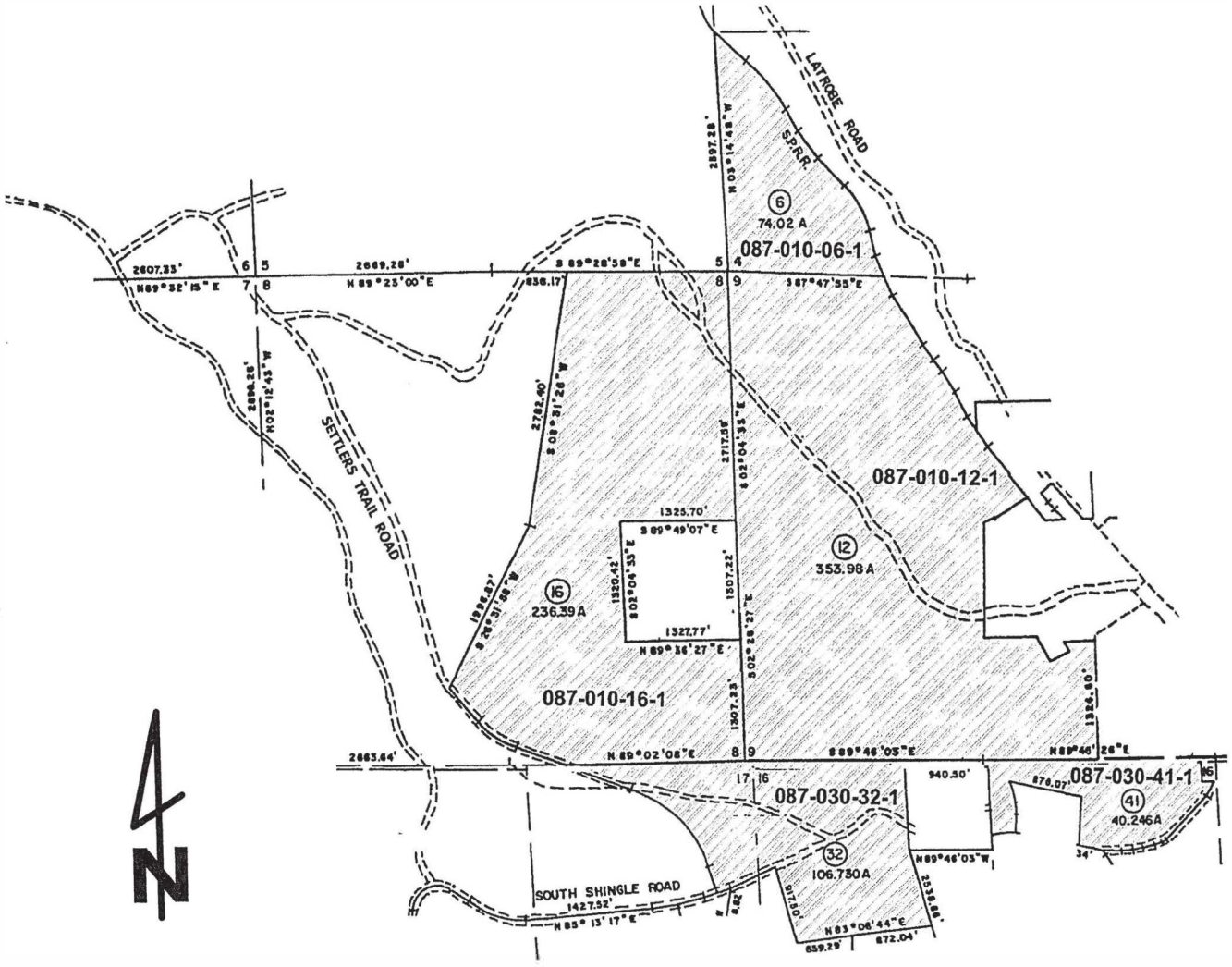
Sincerely,

WHEELDON GEOLOGY

William T. Mitchell II
Professional Geologist # 5445

attachments

A PORTION OF EL DORADO COUNTY ASSESSORS BOOK 087 PAGES 01 & 03



SCALE

0 2000 feet

Basemap from El Dorado County Assessors Parcel Map

WHEELDON GEOLOGY

Consulting Geologists

420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667

530-621-4482 • FAX 530-621-4481

*Figure not OCR compatible.

PARCEL MAP

RANCHO VICTORIA PROJECT PARCELS

Figure 1

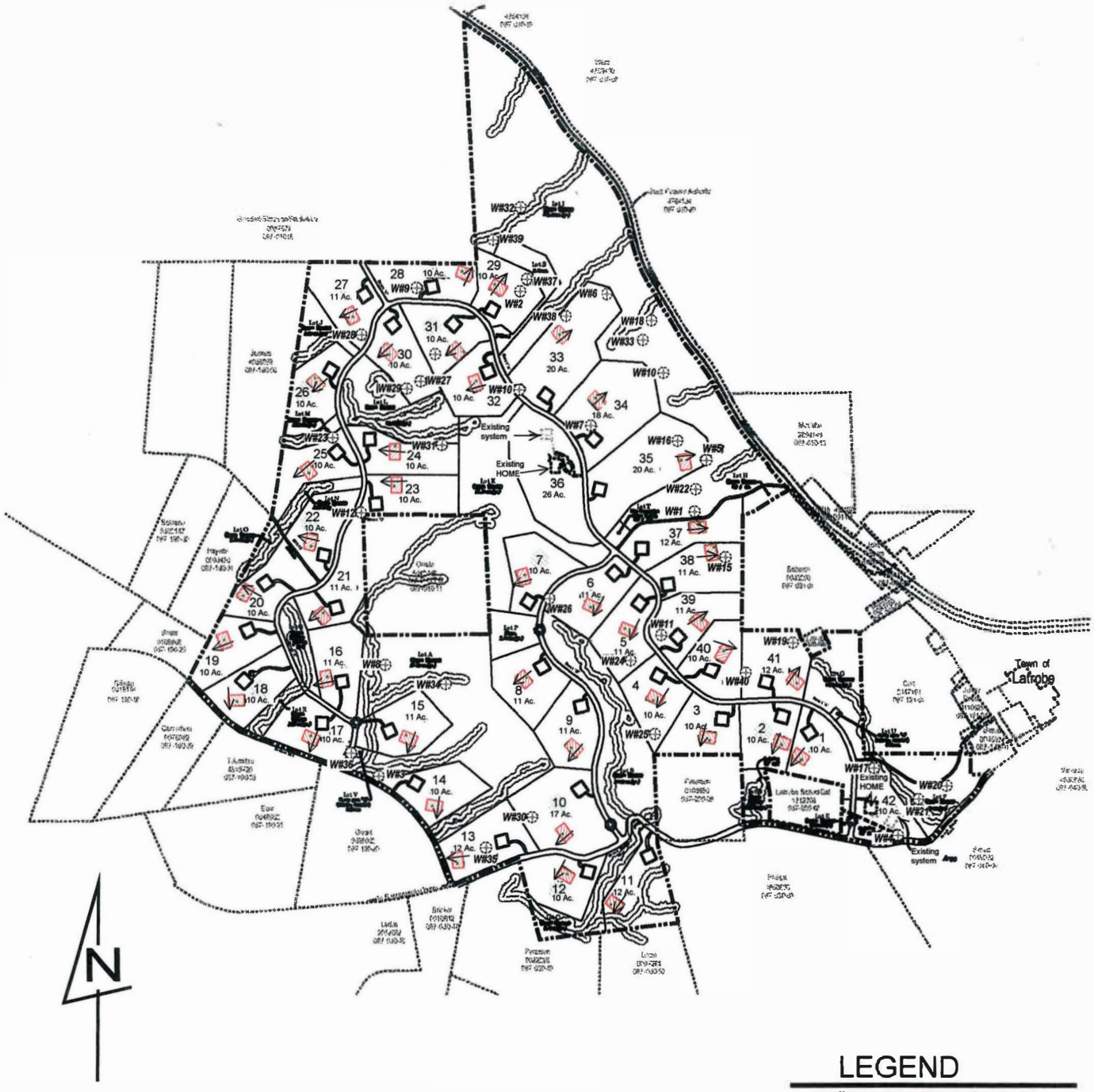
FIGURE

SCALE 1"~2000' JOB NO. 07-85

DRAWN BY WTM II DATE 11-8-07

PROPOSED SITE MAP OF LOTS, SOIL TEST TRENCHES, AND ONSITE SEWAGE DISPOSAL AREAS

APN: 087-010-06, 12, & 16-100 & 087-030-32 & 41-100



SCALE

0 2000 FEET

LEGEND

- W#15 WELL SITE WITH 100 FT SETBACK
- SOIL TEST TRENCH
- 12,000 SQUARE FOOT MINIMUM, AVAILABLE SEWAGE DISPOSAL AREA
- WETLANDS WITH 50 FOOT BUFFER
- HOME SITE WITH DRIVEWAY
- SLOPE DIRECTION
- 24 / 10 Ac. LOT NUMBER AND ACREAGE ±
- PROPERTY BOUNDARY
- LOTS WITH PERCOLATION TEST

BASE MAP REF.: MACKAY & SOMPS December 2007

WHEELDON GEOLOGY
Consulting Geologists
420 PLACERVILLE DRIVE • PLACERVILLE • CALIFORNIA • 95667
530-621-4482 • FAX 530-621-4481

*Figure not OCR compatible.

SITE MAP

RANCHO VICTORIA PROJECT

Figure 2

FIGURE

SCALE See Map JOB NO 07-85

DRAWN BY WTM II DATE 11-8-07

SOIL TEST TRENCH INSPECTIONS

LOT #	DEPTH (feet)	SOIL PROFILE
1	0 - 2.0	Red sandy silty loam
	2.0 - 2.5	Red sandy clay
	2.5 - 8.0	Yellow brown clayey sandy soil
		on mod.- poorly weathered metagabbro
2	0 - 1.0	Yellow red sandy silty loam
	1.0 - 3.0	Red clay sandy soil
	3.0 - 8.0	Yellow brown sandy silty rocky soil
		on mod. weathered metagabbro
3	0 - 1.0	Red sandy silty loam
	1.0 - 2.5	Red brown clay
	2.5 - 8.0	yellow brown silty clay soil
		on mod. weathered metagabbro
4	0 - 1.0	Red sandy silty loam
	1.0 - 3.0	Yellow brown rocky clayey soil
	3.0 - 8.5	Yellow rocky silty sandy soil
		on mod. weathered metavolcanic rock
5	0 - 1.0	Red yellow sandy silty soil
	1.0 - 2.5	Yellow red clayey silty sandy soil
	2.5 - 8.5	Red brown rocky clayey soil
		on mod. weathered metavolcanic rock
6	0 - 1.5	Red yellow sandy silty soil
	1.5 - 2.5	Red clay
	2.5 3.5	Yellow red rocky clayey soil
	3.5 - 8.5	Yellow brown rocky clayey silty soil
		on mod.- poorly weathered metavolcanic rock
7	0 - 1.0	Yellow red silty sandy loam
	1.0 - 2.0	Red brown clayey silty soil
	2.0 3.0	Red clay
	3.0 - 7.5	Yellow brown clayey silty sandy soil
		on mod.- strongly weathered metagabbroic rock
8	0 - 1.0	Yellow brown sandy silty soil
	1.0 - 3.0	Yellow red rocky clayey silty soil
	3.0 - 7.5	Yellow and red rocky silty clay soil
		on mod.- poorly weathered metavolcanic rock
9	0 - 1.5	Yellow red sandy silty loam
	1.5 - 3.0	Yellow brown sandy clay
	3.0 4.5	Yellow red clayey sandy soil
	4.5 - 8.0	Yellow brown rocky silty clayey sandy d.g. soil
		on mod.- strongly weathered metagabbroic rock

SOIL TEST TRENCH INSPECTIONS

LOT #	DEPTH (feet)	SOIL PROFILE
10	0 - 2.0 2.0 - 7.5	Yellow - red rocky clay silty soil Dark brown rocky clayey soil on mod.- poorly weathered metavolcanic rock
11	0 - 1.5 1.5 - 4.5 4.5 - 8.5	Yellow red sandy silty loam Yellow brown sandy clay soil Brown rocky sandy clay - clayey sandy soil on mod. weathered metagabbro
12	0 - 1.5 1.5 - 5.5 5.5 - 8.0	Yellow red sandy silty soil Red brown clay soil Yellow brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
13	0 - 2.0 2.0 - 4.0 4.0 - 8.3	Reddish yellow sandy silty soil Yellow brown clayey rocky soil Brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
14	0 - 1.5 1.5 - 3.5 3.5 - 8.5	Yellow brown silty soil Yellow brown rocky clay soil Brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
15	0 - 2.0 2.0 - 4.5 4.5 - 8.5	Red yellow sandy silty soil Yellow brown rocky clayey silty soil Yellow brown rocky silty soil on mod. weathered metavolcanic rock
16	0 - 1.0 1.0 - 2.0 2.0 - 7.5	Red yellow sandy silty clay soil Yellow brown silty clay soil Brown clayey silty rocky soil on mod.- poorly weathered metavolcanic rock
17	0 - 1.5 1.5 - 3.5 3.5 - 7.5	Red yellow silty sandy soil Yellow brown rocky sandy silty soil Brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
18	0 - 1.5 1.5 - 2.5 2.5 - 7.5	Yellow red silty sandy soil Red yellow rocky clayey sandy silty soil Yellow brown rocky silty soil on mod.- poorly weathered metavolcanic rock
19	0 - 1.5 1.5 - 2.5 2.5 4.0 4.0 - 8.0	Reddish yellow silty sandy soil Red yellow-brown rocky clay - clay silty soil Yellow brown rocky silty clay soil Brown rocky clayey silty soil on mod. - poorly weathered metavolcanic rock

SOIL TEST TRENCH INSPECTIONS

LOT #	DEPTH (feet)	SOIL PROFILE
20	0 - 1.5 1.5 - 4.0 4.0 - 8.2	Red yellow silty sandy loam Yellow brown rocky silty clay soil Brown blocky rocky clay soil on poorly weathered metagabbro
21	0 - 1.5 1.5 - 4.5 4.5 - 8.0	Red yellow silty sandy loam Yellow brown rocky silty clay soil Brown rocky clay soil on mod.- poorly weathered metavolcanic rock
22	0 - 2.0 2.0 - 4.5 4.5 - 7.5	Red yellow silty loam Brown red rocky clay silty soil Brown rocky clayey sandy silty soil on mod.- poorly weathered metavolcanic rock
23	0 - 2.0 2.0 - 4.0 4.0 - 7.5	Red yellow silty loam Yellow red rocky clay silty soil Yellow brown rocky silty soil on mod.- poorly weathered metavolcanic rock
24	0 - 2.0 2.0 - 4.5 4.5 - 7.5	Red yellow silty loam Yellow red rocky sandy clay soil Brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
25	0 - 1.5 1.5 - 3.5 3.5 - 7.5	Yellow red sandy silty soil Red - red brown rocky clayey silty soil Yellow brown rocky silty soil on mod.- poorly weathered metavolcanic rock
26	0 - 1.5 1.5 - 2.5 2.5 - 7.5	Yellow red sandy silty soil Yellow brown rocky clayey soil Brown - red brown rocky silty clay soil on poorly weathered metavolcanic rock
27	0 - 1.5 1.5 - 3.0 3.0 - 7.5	Red brown clayey sandy silty soil Yellow red sandy clay Yellow brown rocky sandy clay soil on mod.- poorly weathered metavolcanic rock
28	0 - 1.0 1.0 - 3.5 3.5 6.0 6.0 - 7.5	Yellow red rocky sandy silty soil Red yellow rocky clay sandy soil Yellow red rocky silty soil Light brown rocky silty soil on poorly weathered metavolcanic rock

SOIL TEST TRENCH INSPECTIONS

LOT #	DEPTH (feet)	SOIL PROFILE
29	0 - 2.0 2.0 - 4.5 4.5 - 8.0	Red sandy silty loam Red brown crumbly clayey sandy soil Yellow brown rocky crumbly silty soil on mod.- poorly weathered metavolcanic rock
30	0 - 1.5 1.5 - 2.5 2.5 - 7.5	Red yellow sandy silty soil Yellow brown clayey sandy soil Light yellow brown rocky clayey silty soil on mod.- poorly weathered metavolcanic rock
31	0 - 1.5 1.5 - 2.5 2.5 - 7.5	Red yellow silty sandy soil Yellow red rocky clayey silty soil Light brown rocky silty clay soil on mod.- poorly weathered metavolcanic rock
32	0 - 1.5 1.5 - 3.5 3.5 - 7.5	Red yellow silty sandy soil Yellow red rocky clayey soil Yellow brown rocky sandy silty soil on mod.- poorly weathered metavolcanic rock
33	0 - 2.0 2.0 - 4.5 4.5 - 7.5	Yellow red sandy silty loam Red yellow rocky sandy clay soil Yellow brown rocky silty soil on mod.- poorly weathered metavolcanic rock
34	0 - 1.5 1.5 - 3.0 3.0 - 7.5	Yellow red sandy silty soil Yellow rocky clayey silty soil Light brown rocky silty sandy soil on mod.- poorly weathered metavolcanic rock
35	0 - 1.5 1.5 - 2.5 2.5 - 7.5	Brown silty loam Yellow brown rocky clayey soil Yellow brown rocky silty soil on mod. weathered metavolcanic rock
36		*EXISTING SYSTEM*
37	0 - 2.0 2.0 - 4.5 4.5 - 7.5	Light brown silty loam Yellow brown rocky silty clay soil Red brown-yellow brown rocky silty soil on mod.- poorly weathered metavolcanic rock
38	0 - 2.5 2.5 - 4.5 4.5 - 7.5	Light brown silty loam Red brown rocky silty clay soil Light brown rocky clayey silty soil on mod.- poorly weathered metavolcanic rock

SOIL TEST TRENCH INSPECTIONS

LOT #	DEPTH (feet)	SOIL PROFILE
39	0 - 0.5 0.5 - 2.0 2.0 - 8.5	Yellow red silty sandy soil Red sandy clay soil Yellow brown rocky silty sandy soil on mod. weathered metavolcanic rock
40	0 - 1.5 1.5 - 2.0 2.0 3.5 3.5 - 4.0 4.0 - 8.0	Yellow red sandy silty loam Yellow brown clayey sandy soil Red clay Yellow brown sandy clay soil Light brown silty soil on mod. weathered metavolcanic rock
41	0 - 1.5 1.5 - 2.0 2.0 3.0 3.0 - 6.0 6.0 - 8.0	Light brown - yellow red sandy silty loam Red sandy clay silty soil Red clay Yellow brown rocky sandy clay soil Light brown silty sandy soil on mod. weathered metavolcanic rock
42		*EXISTING SYSTEM*

PERCOLATION TEST DATA

LOT #	DEPTH (feet)	PERC RATE (min / in)	AVERAGE PERC RATE (min / in)
2	1.5 1.5 2.0 1.5	25 42 36 24	**32**
7	1.5 1.5 2.0 1.5	38 25 97 231	**98**
10	1.5 1.5 1.5 2.0	83 103 88 63	**84**
12	1.5 2.0 1.5 1.5	73 59 48 80	**65**
18	1.5 2.0 1.5 1.5	81 75 113 95	**91**
22	1.5 1.5 1.5 2.0	58 31 29 48	**41**
26	1.5 1.5 2.0 1.5	65 100 94 74	**83**
31	1.5 1.5 1.5 2.0	75 75 61 77	**72**

TEST TRENCH GPS COORDINATES

LOT #	DATE INSPECTED BY EL DORADO CO. ENVIRONMENTAL MNGT.	PERC. Y / N	DEPTH (feet)	COORDINATES (Degrees) Datum: NAD83	ELEVATION
1	9/26/2007	N	8.0	N38.55738 W120.99102	869 ft
2	9/26/2007	Y	8.0	N38.55788 W120.99195	805 ft
3	9/26/2007	N	8.0	N38.55830 W120.99442	871 ft
4	9/26/2007	N	8.5	N38.55931 W120.99651	811 ft
5	9/26/2007	N	8.5	N38.56149 W120.99762	872 ft
6	9/26/2007	N	8.5	N38.56235 W120.99891	849 ft
7	9/26/2007	Y	7.5	N38.56333 W121.00141	873 ft
8	9/26/2007	N	7.5	N38.56015 W121.00120	822 ft
9	9/26/2007	N	8.0	N38.55800 W120.99947	755 ft
10	9/21/2007	Y	7.5	N38.55539 W120.99987	686 ft
11	9/26/2007	N	8.5	N38.55339 W120.99770	671 ft
12	9/26/2007	Y	8.0	N38.55422 W120.99991	626 ft
13	9/21/2007	N	8.3	N38.55467 W121.00373	608 ft
14	9/21/2007	N	8.5	N38.55655 W121.00537	569 ft
15	9/21/2007	N	8.5	N38.55818 W121.00592	542 ft
16	9/21/2007	N	7.5	N38.56035 W121.00874	607 ft
17	9/21/2007	N	7.5	N38.55867 W121.00919	589 ft
18	9/21/2007	Y	7.5	N38.55913 W121.01226	646 ft
19	9/21/2007	N	8.0	N38.56114 W121.01272	551 ft
20	9/21/2007	N	8.2	N38.56239 W121.01224	615 ft
21	9/21/2007	N	8.0	N38.56239 W121.00914	645 ft
22	10/5/2007	Y	7.5	N38.56407 W121.00940	638 ft
23	10/5/2007	N	7.5	N38.56585 W121.00605	789 ft
24	10/5/2007	N	7.5	N38.56687 W121.00578	761 ft
25	10/5/2007	N	7.5	N38.56657 W121.00952	630 ft
26	10/5/2007	Y	7.5	N38.56892 W121.00914	727 ft
27	10/5/2007	N	7.5	N38.57132 W121.00786	843 ft
28	10/5/2007	N	7.5	N38.57212 W121.00364	908 ft
29	10/5/2007	N	8.0	N38.57165 W121.00231	939 ft
30	10/5/2007	N	7.5	N38.56965 W121.00634	858 ft
31	10/5/2007	Y	7.5	N38.56960 W121.00357	947 ft
32	10/5/2007	N	7.5	N38.56890 W121.00343	906 ft
33	10/5/2007	N	7.5	N38.57026 W120.99989	888 ft
34	10/5/2007	N	7.5	N38.56972 W120.99882	889 ft
35	OK'ed by County	N	7.5	N38.56653 W120.99539	854 ft
36				*EXISTING SYSTEM*	
37	OK'ed by County	N	7.5	N38.56550 W120.99439	817 ft
38	OK'ed by County	N	8.0	N38.55844 W120.99411	805 ft
39	9/26/2007	N	8.5	N38.56163 W120.99523	898 ft
40	9/26/2007	N	8.0	N38.56085 W120.99361	892 ft
41	9/26/2007	N	8.0	N38.55997 W120.99100	925 ft
42				*EXISTING SYSTEM*	

APPENDIX H

ENVIRONMENTAL NOISE ASSESSMENT

Environmental Noise Assessment

Latrobe Road Subdivision

El Dorado County, California

January 28, 2022

Project #211203

Prepared for:

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Table of Contents

INTRODUCTION **3**

ENVIRONMENTAL SETTING **3**

BACKGROUND INFORMATION ON NOISE *3*

EFFECTS OF NOISE ON PEOPLE *7*

EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS **7**

EXISTING NOISE RECEPTORS *7*

EXISTING GENERAL AMBIENT NOISE LEVELS *8*

FUTURE TRANSPORTATION NOISE ENVIRONMENT ON THE PROJECT SITE **9**

CONSTRUCTION NOISE ENVIRONMENT **11**

CONSTRUCTION VIBRATION ENVIRONMENT **12**

REGULATORY CONTEXT **13**

FEDERAL *13*

STATE *13*

LOCAL *13*

IMPACTS AND MITIGATION MEASURES **16**

THRESHOLDS OF SIGNIFICANCE *16*

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES *17*

REFERENCES **21**

Appendices

Appendix A: Acoustical Terminology

Appendix B: Field Noise Measurement Data

List of Figures

Figure 1: Site Plan 4
Figure 2: Noise Measurement Sites and Receptor Locations 5
Figure 3: Future Transportation Noise Level Contours 10

List of Tables

Table 1: Typical Noise Levels 6
Table 2: Summary of Existing Background Noise Measurement Data 8
Table 3: Construction Equipment Noise 11
Table 4: Vibration Levels for Various Construction Equipment 12
Table 5: Maximum Allowable Noise Exposure for Transportation Noise Sources 13
Table 6: Effects of Vibration on People and Buildings 15
Table 7: El Dorado County Construction Noise Standards 18

INTRODUCTION

The Latrobe Road Subdivision project consists of the development of a 8-parcel subdivision on an approximately 520-acre project site. The minimum lot size for each parcel will be 40 acres. One of the eight lots is currently developed. The project is located west of Latrobe Road and north of South Shingle Road in El Dorado County, California.

Figure 1 shows the project site plan. **Figure 2** shows noise measurement locations and an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

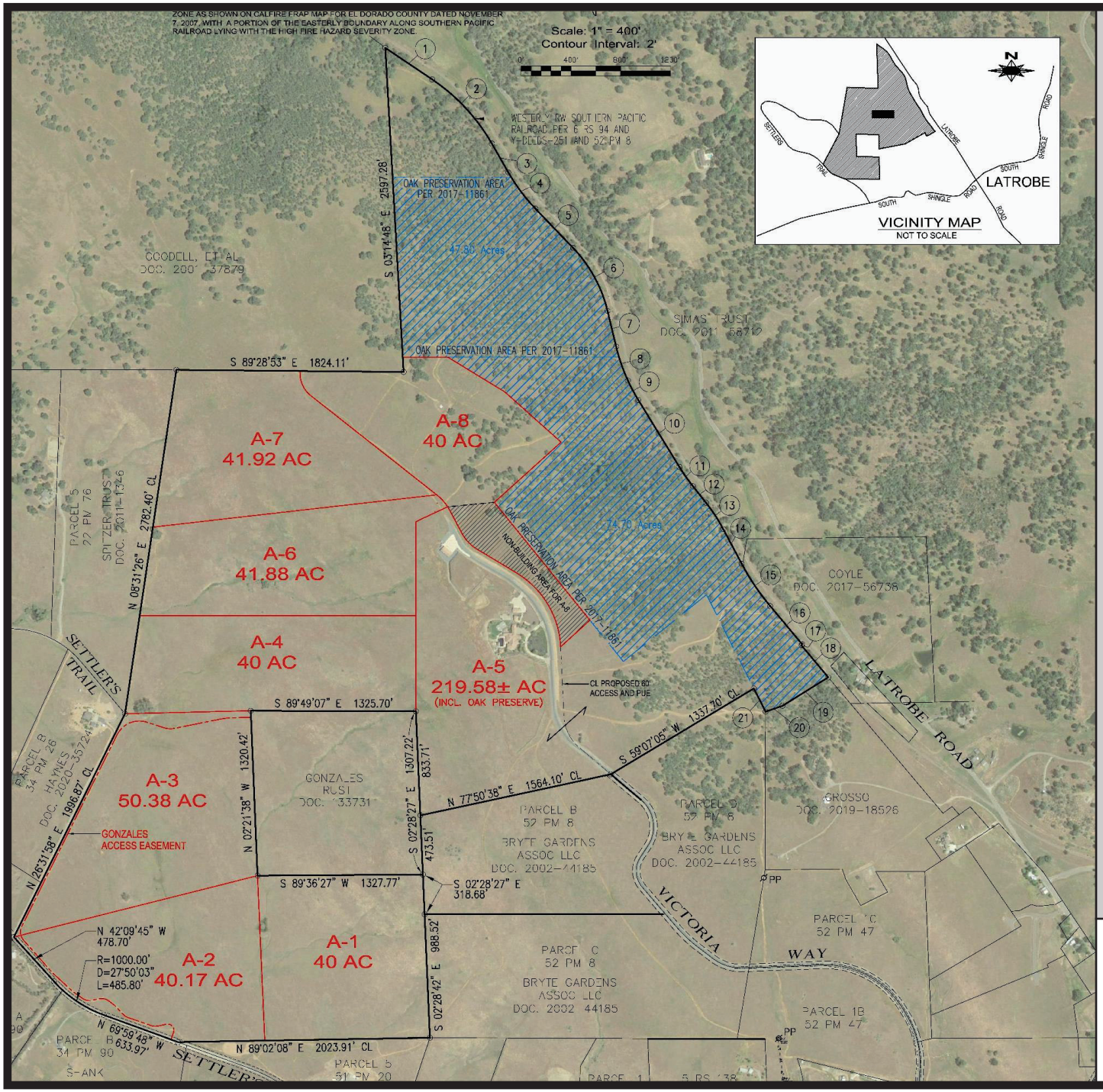
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

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), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this 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, and changes in levels (dB) correspond closely to human perception of relative loudness.

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 A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



Latrobe Road Subdivision

El Dorado County, California

Figure 1

Project Site Plan

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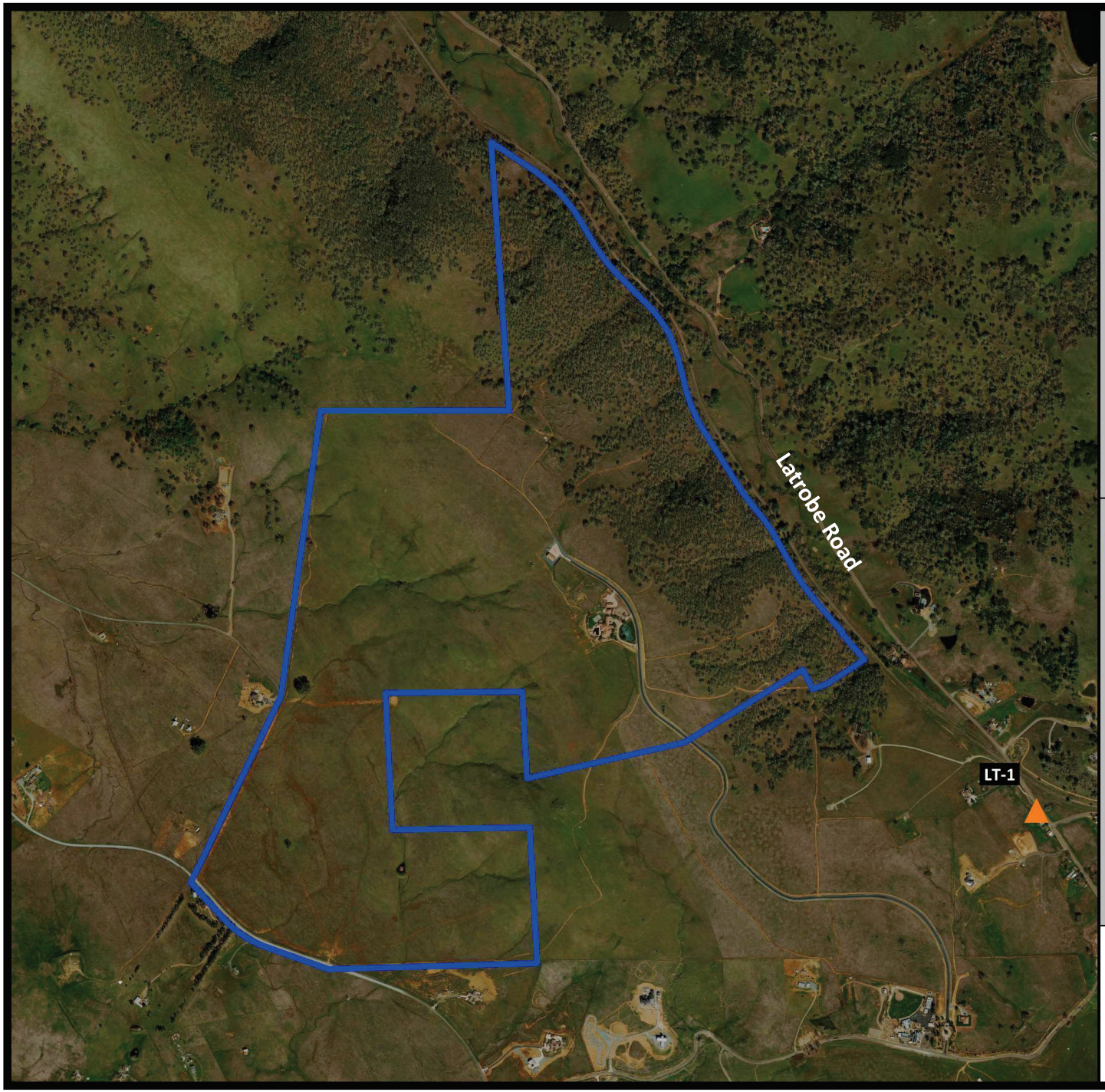

Latrobe Road Subdivision

El Dorado County, California

Figure 2

Noise Measurement Sites

Legend

Project Site

Noise Measurement Site - Long Term

0 ft 750 ft 1500 ft 2250 ft

Projection: UTM Zone 10 / GOOGLE / meters
Rev. Date: 01/24/2022

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The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

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 environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include Latrobe

Elementary school to the south of the project site and existing single-family residential uses located west, east, and south of the project site. One existing single family home is located on Parcel A-5 of the project site.

Existing General Ambient Noise Levels

The existing noise environment in the project area is primarily defined by traffic on Latrobe Road to the east of the project site.

Saxelby Acoustics conducted a continuous noise measurement survey to quantify the existing ambient noise environment at the project site. The noise measurement location is shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meter was programmed to record the maximum, median, and average noise levels at the project site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Table 2: Summary of Existing Background Noise Measurement Data

Site	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1	01/20/22	68	67	53	83	61	35	80

Notes:

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics 2022*

FUTURE TRANSPORTATION NOISE ENVIRONMENT ON THE PROJECT SITE

Saxelby Acoustics utilized the collected sound level data for the local roadway network to predict project transportation noise exposure levels. The primary noise source on the project site was traffic noise emanating from Latrobe Road. The traffic noise levels for the segment of Latrobe Road adjacent to the project site are projected to increase by approximately one decibel by 2042 based upon an assumed 2% annual increase in traffic volumes.

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed residential uses due to traffic on Latrobe Road. **Figure 3** shows future (2043) noise contours (dBA, L_{dn}) on the project site.

Latrobe Road Subdivision

El Dorado County, California

Figure 3

Future (2043) Transportation Noise Contours (dBA L_{dn})

Signs and symbols

Levels in dB(A)

<= 60
60 - 65
65 - 70
> 70

1 : 13500

0 50100 200 300 400 m

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Acoustics · Noise · Vibration

CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, including roads, water and sewer lines, and related infrastructure, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 3: CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: *Roadway Construction Noise Model User's Guide*. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 4** shows the typical vibration levels produced by construction equipment.

TABLE 4: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: *Transit Noise and Vibration Impact Assessment Guidelines.* Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

There are no state regulations related to noise that apply to the Proposed Project.

LOCAL

The El Dorado County General Plan establishes maximum allowable noise exposure for sensitive land uses affected by transportation noise sources. **Table 5** below shows the El Dorado County Land Use Compatibility Chart.

TABLE 5: MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Areas[1] L_{dn}/CNEL, dB	Interior Spaces	
		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, Schools	60[3]	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

[1] In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

[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.

Table 5 shows the El Dorado County's maximum allowable noise exposure to transportation sources at outdoor and indoor spaces. For residential uses, the maximum transportation noise level allowed at outdoor activity areas is 60 dBA L_{dn} and the maximum interior noise level allowed is 45 dBA L_{dn}.

Criteria for Acceptable 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 in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

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. **Table 6**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

Table 6 indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. A threshold of 0.2 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 6: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: *Transportation Related Earthborne Vibrations.* Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
b. Generate 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?

Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases

The El Dorado County General Plan outlines criteria for determination of significant impacts due to noise.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;

B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant; and

C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

Policy 6.5.1.13 When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

A. In areas in which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 5 dBA shall be considered significant; and

In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new nontransportation noise sources that exceed 3 dBA shall be considered significant.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACT 1: WOULD THE PROJECT GENERATE 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?

Operational Noise at Existing Sensitive Receptors

The proposed project would include typical residential noise which would be compatible with the adjacent existing residential uses. Therefore, impacts resulting from project operational noise would be considered ***less-than-significant***.

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

The nearest residential use is located approximately 800 feet to the northwest, as measured from the center of Parcel A-3. At this distance, maximum construction noise levels would be in the range of 32-46 dBA L_{eq} and 52-66 dBA L_{max} at the nearest residential uses. This could exceed the County's 60 dBA L_{max} construction noise level limits, as outlined in Table 6-5 of the County's General Plan, shown below in **Table 7**. However, as stated in the County General Plan Policy 6.5.1.11 and Chapter 130.37 of the County Code, the standards outlined in Table 6-5 do not apply to noise levels generated by construction activity that occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally recognized holidays.

TABLE 7: EL DORADO COUNTY CONSTRUCTION NOISE STANDARDS

TABLE 6-5 MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NONTRANSPORTATION NOISE SOURCES IN RURAL REGIONS–CONSTRUCTION NOISE			
Land Use Designation	**Time Period**	**Noise Level (dB)**	
		L_{eq}	L_{max}
All Residential (LDR)	7 am-7 pm 7 pm-10 pm 10 pm-7 am	50 45 40	60 55 50
Commercial, Recreation, and Public Facilities (C, TR, PF)	7 am-7 pm 7 pm -7 am	65 60	75 70
Rural Land, Natural Resources, Open Space, and Agricultural Lands (RR, NR, OS, AL)	7 am-7 pm 7 pm -7 am	65 60	75 70

While daytime construction noise is exempt under the County policies, mitigation measures have been identified to minimize noise levels due to construction activities.

Exterior noise at New Sensitive Receptors (Non-CEQA Issue)

Exterior Transportation Noise

As shown on **Figure 3**, the southern boundary of the project site is predicted to be exposed to exterior noise levels of up to 53 dBA L_{dn}. This would comply with the County's 60 dB L_{dn} limit for outdoor activity areas of new residential uses with no additional noise control measures.

Interior Transportation Noise

Based upon **Figure 3**, the proposed project would be exposed to exterior noise levels of up to 53 dBA L_{dn} at the lots closest to Latrobe Road.

Modern building construction methods typically yield an exterior-to-interior noise level reduction of 25 dBA. Therefore, where exterior noise levels are 70 dBA L_{dn}, or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be 53 dBA L_{dn}, resulting in an interior noise level of 28 dBA L_{dn} based on typical building construction. This would comply with the County's 45 dBA L_{dn} interior noise level standard.

Therefore, no additional noise control measures would be required.

Mitigation Measure

1 (a) The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:

- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed*

"package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise- control features that are readily available for that type of equipment.

- *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.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Implementation of mitigation measures 1(a) would help to reduce construction-generated noise levels. With mitigation, this impact would be considered ***less-than-significant***.

IMPACT 2: WOULD THE PROJECT GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 4** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed

acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

This is a ***less-than-significant*** impact and no mitigation is required.

IMPACT 3: **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?**

There are no airports within two miles of the proposed project. Therefore, this is a ***less-than-significant*** impact and no mitigation is required.

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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.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
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 +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

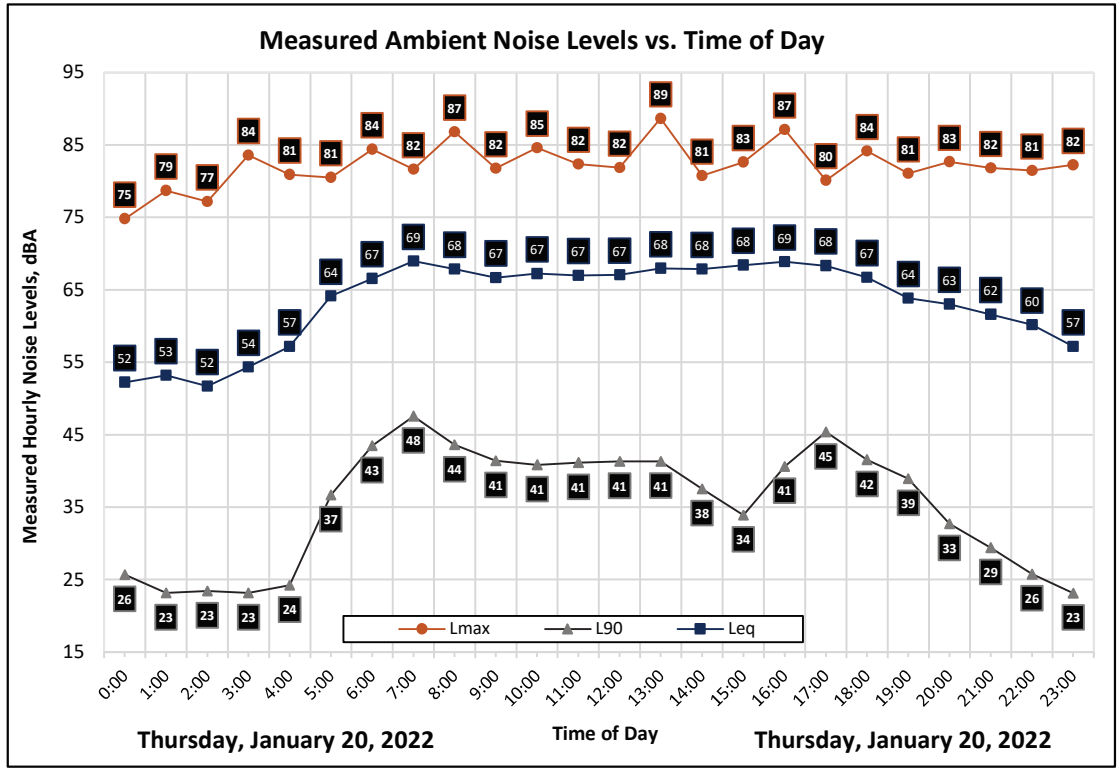
Appendix B: Continuous Ambient Noise Measurement Results

Appendix B1: Continuous Noise Monitoring Results

Site: LT-1
Project: Latrobe Road Subdivision
Location: Southeast of Project Site
Coordinates: 38.5614718°, -120.9857117°
Meter: LDL 820-1
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Thursday, January 20, 2022	0:00	52	75	29	26
Thursday, January 20, 2022	1:00	53	79	25	23
Thursday, January 20, 2022	2:00	52	77	25	23
Thursday, January 20, 2022	3:00	54	84	27	23
Thursday, January 20, 2022	4:00	57	81	31	24
Thursday, January 20, 2022	5:00	64	81	48	37
Thursday, January 20, 2022	6:00	67	84	53	43
Thursday, January 20, 2022	7:00	69	82	61	48
Thursday, January 20, 2022	8:00	68	87	57	44
Thursday, January 20, 2022	9:00	67	82	54	41
Thursday, January 20, 2022	10:00	67	85	53	41
Thursday, January 20, 2022	11:00	67	82	54	41
Thursday, January 20, 2022	12:00	67	82	54	41
Thursday, January 20, 2022	13:00	68	89	54	41
Thursday, January 20, 2022	14:00	68	81	57	38
Thursday, January 20, 2022	15:00	68	83	57	34
Thursday, January 20, 2022	16:00	69	87	58	41
Thursday, January 20, 2022	17:00	68	80	59	45
Thursday, January 20, 2022	18:00	67	84	52	42
Thursday, January 20, 2022	19:00	64	81	46	39
Thursday, January 20, 2022	20:00	63	83	44	33
Thursday, January 20, 2022	21:00	62	82	40	29
Thursday, January 20, 2022	22:00	60	81	37	26
Thursday, January 20, 2022	23:00	57	82	28	23

Statistics	Leq	Lmax	L50	L90
Day Average	67	83	53	40
Night Average	61	80	34	28
Day Low	62	80	40	29
Day High	69	89	61	48
Night Low	52	75	25	23
Night High	67	84	53	43
Ldn	68	Day %		90
CNEL	69	Night %		10



APPENDIX I

WILDLAND FIRE SAFE PLAN

Rancho Victoria Fire Safe Plan

Response to EDHFD Comments of August 28, 2024

Callout #	Addressed on Page	SQ Cannon Comment
2	Page 4, paragraph 3 and page 9	Road maintenance on Settler's Trail
3	57, append K	Colors added for fire history
7	5	Paragraph below table
5	23	Edited appendix reference to "E" not "D"
9	7 & 12	Under Water Supply and Fire Safe Requirements item F
10	8	Under Building Ignition & Fire Resistance factors
19	10	Under Driveways & Gates
21	11	2nd paragraph, under A
25	11	2nd paragraph, under A
30	12	Under F
34	5	Under Environmental Setting & Climatic Conditions
36	13	Under Q
37	107	Under Appendix Q
42	10	Under c. Driveways & Gates

Rancho Victoria Subdivision

Wildland Fire Safe Plan

El Dorado County

APN 087-010-043

Tentative Map Number TM22-0004

Prepared by:

Steve Q. Cannon

Foothill Resource Management
P.O. Box 818, Pine Grove, CA 95665
Registered Professional Forester #2316

4 September 2024

v.4

Approved by:

_____ _____

Chrishana Fields Date
Fire Marshal
El Dorado Hills Fire Department

_____ _____

Jeff Hoag Date
Battalion Chief, Amador/El Dorado Unit
Wildfire Resiliency Program
California Department of Forestry & Fire Protection

Prepared by:

4 Sept 2024

Steve Q. Cannon Date
Foothill Resource Management
'Registered Professional Forester #2316

Fire Safe Plans shall be reviewed and updated by the property owner no less than once every five years after its original approval to ensure that the project complies with all current regulations and requirements for existing developments. The AHJ and CAL FIRE shall review and approve this plan update prior to its use.

CONTENTS

I. Purpose..... .. 4

II. Fire History 4

III. Environmental Setting & Climatic Conditions 5

IV. Topography & Aspects.....6

V. Flammable vegetation 6

VI. Roads & Emergency Access.....6

VII Water Supply 7

VIII. Building Ignition & Fire Resistance Factors 8

IX. Street Signing & Building Numbering 8

X Wildfire Risk Assessment 8

XI Fire Plan Limitations 8

XII. Landowner Responsibilities for Vegetation Management 9

XIII. Driveways & Gates 10

XIV. Fire Safe Requirements 11

XV. Conclusion.....12

Appendices

A. Project Vicinity Map
B.. Tentative Subdivision Map
C. Slope Analysis Map
D. Preliminary Pad Location & Grading Detail Map
E. Topographic Map showing Vegetation Types
F. Highly Flammable Vegetation List
G. State Minimum Fire Safe Regulations
H. Well Map
I. Well Completion Reports
J. Topographic Map showing Pond & Pool locations & Fuelbreak
K. Fire History Map and Fire Name Table
L. CalFire "Ready For Fire" Diagram
M. Memorandum of Understanding – County of El Dorado and El Dorado County Water District
N. Residential Setback for Structure Defensible Space – EDHFD Standard 7
O. Ordinance 2023-1 – Eldorado County/EDHF
P. List of Fire Resistant Trees
Q. Fire Severity Rating Worksheet

Purpose:

This plan provides the specific requirements that must be met in order to comply with the Fire Safe requirements as per CFC Chapter 49 and the El Dorado Hills Fire Department.

The purpose of the Rancho Victoria Wildland Fire Safe Plan is to provide guidance for the objective of providing a measure of protection against wildfire for the subdivision of the property with the Assessor Parcel Number of 087-010-043 in El Dorado County, California.

This parcel is 513.93 acres and is proposed to be divided into 8 parcels. The minimum parcel size is 40 acres and the largest parcel will be 219.58 acres. This largest parcel includes an oak woodland preserve that has development restrictions placed upon it and recorded with the County of El Dorado. The property is located in Latrobe, CA and is bordered by Latrobe Road on the east, South Shingle Road on the south and Settler's Trail on the west. Road access to the property is via South Shingle Road to Settler's Trail. Proposed lots A-1, A-2, A-3 will be accessed from Settler's Trail. Proposed Lot A-4 will be accessed via an easement from Settler's Trail where the south boundary of A-4 joins the north boundary of A-3. Proposed lot A-5 is currently accessed by Victoria Way and is the 219.58 acre lot with an existing residence and outbuildings and the oak woodland reserve. Proposed Lot A-6 shall be accessed from the existing terminus of Victoria Way. Proposed Lots A-7 and A-8 will be accessed by an extension of the existing Victoria Way. South Shingle Road is a county road and road maintenance is the responsibility of the County of El Dorado. Settler's Trail is a private road and road maintenance is the responsibility of the landowners which use the road to access their properties. The Rainbow Meadows HOA represents current landowners on Settler's Trail. A separate HOA or Road Association shall be established for future landowners of proposed lots A-1, A-2, A-3 & A-4 and that entity shall have proportional road maintenance responsibility for the portion of Settler's Trail that abuts their properties. Victoria Way is a private road with its own HOA and road maintenance is the responsibility of the landowners that use the road to access their properties. The Tentative Map (Appendix B, page 17) shows the proposed easements and the easements will be shown on the Final Subdivision Map.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future parcels will help to reduce the incidence, size and intensity of wildfires and help prevent catastrophic fire losses. State and County regulations provide the basic guidelines and requirements for fire safe mitigation measures and defensible space around dwellings. This plan builds on these basic rules and provides additional fire hazard reduction measures customized to the topography and vegetation of the development with special emphases on the interface of homes and wildland fuels.

FIRE HISTORY

Since 1956, nine (9) wildfires have occurred in the general vicinity of the proposed project. Two of those fires (Scott 1996, Quarry 1976) was quite large (>5000 ac.). The Scott Fire encompassed the proposed project area. The seven other fires (1 in 1956, 1 in 1959, 2 in 1964, 1 in 2017, 1 in 2018 and 1 in 2019) were within 1 to 4 miles of the proposed project area. Of the nine fires, two were attributed to arson, one to a debris fire and the others were of unknown cause

This history, in combination with the majority of the area being in the oak savannah fuel type and prevailing southwest winds, suggest that property owners need to be aware of the potential for a

fast-moving destructive wildfire. Landowners need to be vigilant, comply with PRC 4291 and take measures to reduce the risk of loss due to uncontrolled conflagrations.

A list of the fires noted and a map of their approximate locations can be found on pages 57 & 58 in Appendix K.

Environmental Setting & Climatic Conditions

The Mediterranean climatic condition of the project area is influenced by typically hot, dry summers and moderately wet winters. Summertime temperatures (June-Sept) can typically be in the 80s-90s with temperatures exceeding 100° occurring five to nine days per month (Accuweather & NOAA data). Even on very hot days, the night-time temperatures will drop into the 50s and 60s during the summer. Wintertime temperatures in the 50s. Prevailing winds are from the southwest coming from Sacramento/San Joaquin Delta influences. North winds and northeast winds originating from foehn winds descending from the Sierra Nevada can occur. These winds are typically dryer as they descend from the northeast and east. Average rainfall is 5.74 inches The elevational range of the project area is from 560 feet to 1018 feet. Approximately 50% of the project area has a southwestern aspect. The 2022 Fire Hazard Severity Zone for this project is rated as "High".

The following table shows average wind speeds and humidity levels for three years, 2021-2023. Data comes from the Western Regional Climate Center for the Ben Bolt Station.

Year	June		July		August		September	
	Mph	Humid	Mph	Humid	Mph	Humid	Mph	Humid
2021	3.7	41	3.5	34	3.2	38	3.6	41
2022	4.1	40	3.5	40	3.3	39	3.9	44
2023	3.5	57	3.6	37	3.6	43	3.3	59

While the average wind speeds shown above are relatively moderate, the project area can experience gusts of greater than 20 mph on occasion. When those winds are from the north and northeast, significant vegetation drying will occur.

The Wildlife Habitat Vegetation Types are Annual Grassland and Blue Oak Woodland (see Appendix E, page 23). Plant species common to these Habitat Types are:

Annual Grassland
Wild Oats (Avena fatua)
Soft chess (Bromus hordeaceus)
*Ripgut brome (Bromusd diandrus)
Wild barley (Hordeum spontaneum)
*Foxtail fescue (Vulpia myuros)
Red brome (bromus rubens)
Broadleaf filaree (Erodium cicutarium)
Redstem filaree (Erodium spp)
*Turkey mullein (Croton setiger)
True clover (Trifolium spp)
*Bur clover (Medicago polymorpha)
Popcorn flower (Plagiobothrys spp)
Species observed on project area

Blue Oak Woodland
*Blue Oak (Quercus douglasii)
*Poison Oak (Toxidendron diversilobia)
California coffee berry (Frangula californica)
Redberry (Rhamnus crocea)
California buckeye (Aesculus californica)
*Manzanita (Arctostaphylos spp)
*Brome (Bromus inerme)
Wild oats (Avena fatua)
*Foxtail (Vulpia myuros)
Needlegrass (Stipa spp)
Filaree (Erodium spp)
Fiddleneck (Amsinckia spp)

Only the proposed parcels A-5 and A-8 have native oaks (Blue oak woodland), and A-8 is approximately 90% vegetated with grasses. Proposed parcel A-5 is 219.58 acres, of which approximately 12 acres of oak woodland in the southeast portion of the parcel is not part of the 125 acre oak woodland. These 12 acres are not in close proximity to the existing residence or Victoria Way. Approximately 82 acres of the presently developed A-5 parcel is also grassland. As mentioned, Parcel A-5 has a residence built on it and there is no plan to build any additional residences or to subdivide Parcel A-5 into smaller parcels. The 125 acre oak woodland is reserved under a conservation easement (2017-11861) recorded in the El Dorado County Recorder's office that prohibits any reduction in its size.

The El Dorado County Oak Tree Ordinance applies to the removal of any oak tree only on proposed lots A-5 and A-8. Individual lot owners are responsible for being in compliance with this ordinance. The ordinance does not prevent the pruning of any oak tree that interferes with fire safe maintenance.

Topography & Aspect

Slope classes on the property are generally moderate (0-20% slope). Some areas of steeper slopes (>20%) exist within the V-shaped intermittent drainages and in the northeastern corner of Proposed Lot A-1(see Slope Analysis Map, page 15) All the proposed parcels are located on west to southwest-facing slopes on generally moderate topography, but the proposed building pad locations are not located on the steeper slopes (see Slope Analysis Map, Appendix C and Preliminary Pad Location and Grading Detail Map, Appendix D, pages 19 and 21).

Flammable vegetation

The hazard rating of the project, according to the 2024 International Wildland Urban Interface Code, Appendix C the Fire Severity Rating of the project is Low to Moderate (see Appendix Q, page 107). However, the potential flammability of the vegetation on the proposed project area is high, after the vegetation has dried in the late spring and summer. As shown in the table above the predominant vegetation type for all the proposed parcels on southwestern aspect slopes is grassland/pasture. Annual grasses and forbs dominate the vegetation. The vegetation type on the majority of the project area is composed of fuels that can be rated as having a High Rate of Spread and a Low Resistance to Control. This means that while a fire can spread rapidly, the fire suppression in the type of fuel that is available for burning is relatively feasible with tankers and ground-based firefighting equipment. This does not obviate the need to conduct hazard reduction practices along roads, driveways and in proximity to structures.

Landowners must be aware that some plants that are frequently available at local nurseries can have attributes that make them more susceptible to fire than others. In general, plants with leaves that contain volatile oils (like juniper, conifers) and plants with fine narrow leaves like grasses should not be planted in the 30 foot zone around structures. A list of highly flammable plants and trees is included as Appendix F, page 25 of this plan. A list of Fire Resistant Trees is found in Appendix P, Page 106.

Roads & Emergency vehicle access

Victoria Way is a 24 foot wide, two lane paved private road. South Shingle Road is a 18 foot to 24 foot wide, paved, two lane public road, maintained by the County of El Dorado. Settler's Trail is a 16 foot to 20 foot wide, two-lane private road that is partially paved and otherwise graveled. Settler's Trail shall be widened to a minimum of two ten (10) foot travel lanes, not including shoulders and shall comply with CCR Title 14, Div. 1.5, Chapter 7, Subchapter 2, Article 2, Sub 1273.02. South Shingle Road is a two-lane road capable of supporting emergency fire vehicles and allowing for emergency egress during an event where residents must evacuate. South Shingle Road is also presently capable of handling the response of emergency vehicles, but where the width of the road is less than 20 feet (two, 10-ft lanes), it will be widened under this proposed project. Victoria Way is adequately wide enough and has a stable surface for emergency vehicles. As the proposed extension of Victoria Way is greater than 5280 feet (one mile), an emergency access for ingress and egress is proposed to be constructed from the end of Victoria Way on the northern boundary of the project, west to the western boundary of the project area and thence south-southwest for 2782 feet to Settler's Trail and eliminate the dead-end road situation that currently exists. Victoria Way and its extension pass through Proposed Parcels A-5 and A-8. The roadside vegetation clearing requirements (20 feet on both sides of the road) for that road shall create an approximate 60 foot wide fuelbreak that could be used by firefighting personnel for backfiring either to the southwest or to the northeast (see Tentative Subdivision Map, Appendix B, page 17 and Appendix J, page 55).

The Preliminary Pad Location and Grading Detail Map (Appendix D, page 21) shows the estimated location of pads on each of the proposed parcels. Driveways will be configured as per the State Minimum Fire Safe Regulations (14CCR Division 1.5, Chapter 7) in terms of width, road surface, grades, radius, turnarounds, dead-end roads and gate entrances (see Appendix G, page 27).

Road maintenance for South Shingle Road is the responsibility of the County of El Dorado. Settler's Trail shall be maintained by an agreement between an HOA or Road Association of the landowners of the proposed Rancho Victoria subdivision and the Rainbow Meadows Homeowner's Association. Victoria Way shall be maintained by the landowners of parcels that abut Victoria Way. El Dorado Hills Fire Department shall advise all road associations of road maintenance needs. Removal of vegetation overgrowing the roadway and infringing on the roadway shall be maintained to a height of 15 vertical feet or 20 feet of width.

Water Supply

All parcels will be served by individual wells in compliance with El Dorado County requirements. Water storage tanks that will be sized in compliance with Fire Protection Standard D-003, Table A, and this standard is revised and updated periodically. Property owners need to be aware that the standard for their water tank will be dependent on the size of the structure that is constructed. The Fire Protection Standard D-003 Water Supplies for Suburban and Rural Firefighting Table A standards may change from the date of the approval of this plan and the actual date of structure construction. Future parcel owners must be aware of the current standards under this ordinance. As per NFPA 1142, the appropriately sized water storage tanks (according to the size of the structure) will provide water necessary for domestic, fire sprinklers and wildland fire protection uses. All water tanks shall have a 2 ½ inch National Hose male thread fitting with cap suitable for fire truck drafting or pumping. The project is located in the High Fire Hazard Severity Zone in the State Responsibility Area (SRA) (see note 16 on Rancho Victoria Tentative Map, Appendix B, page

17). Water supplies will meet or exceed Title 14 CCR, Division 1.5, Chapter 7, Subchapter 2, Articles 1-5 – Fire Safe Regulations (See Appendix G, page 27).

Wells have been established on all proposed parcels. A well test report with a project map is provided on pages 43-53 under Appendices H & I.

An approximate 101,500 gallon pond and an approximate 120,000 gallon swimming pool located at the residence on the top of the Ben Bolt Ridge on Parcel A-5 will continue to provide an emergency water source in the event of a wildfire (Appendix J, page 55). As this pond and pool are on a private parcel, future landowners of the proposed parcels will not have a right to its use, but emergency personnel will have access, if needed.

Building Ignition and Fire Resistance Factors

All structures to be built on the proposed parcels shall be in conformance with the California Building Code and EDHFD Ordinances regarding resistance to ignition and interior fire protection systems. The attached Memorandum of Understanding between the County of El Dorado and the El Dorado Hills Water District (Appendix M, page 62) specifies the requirements for the enforcement of certain panic and safety provisions found in the 2022 California Building Standards Code. These standards shall be adhered to in the construction of structures on the proposed parcels. All residences constructed shall conform to the Residential Setback for Structure Defensible Space ordinance (Standard 7, EDHFD). A copy of that ordinance is found in Appendix N on page 67.

Street Signing & Building Numbering

Street signing and building number must comply with California State Fire Safe Regulations described in Subsections 1270-1274 (see Appendix G, page 27). In summary, roads must be identified by a number or name and road signs must have lettering that is 4 inches in height and shall be visible from both directions from a distance of 100 feet. Specific details are found in Appendix G, starting on page 27

Individual residence addresses shall be issued by a local jurisdiction (El Dorado County) and shall comply with the California Fire Code, CCR Title 24, Part 9. Address on a structure shall be a minimum of 4 inches in height and illuminated. Address signs on the street for buildings that are set back more than 100 feet shall be reflectorized and also included an indicator (blue reflectorized 3 inches square or diameter) of the presence of a water tank and hydrant (FSR subsection 1275.04 attached as Appendix G starting on page 27).

Wildfire Risk Assessment

The proposed Rancho Victoria development of the 513.93 acres into 8 parcels will not present any greater risk of wildfire than if the land were not developed at all. The requirements of fuel reduction within the 100-foot radius of any structure (per PRC 4291) will reduce the overall amount of flammable material on the 513.93 acres. Similarly, the reduction of fuel adjacent to roads and driveways will reduce the overall quantity of fuels on the total project acreage. If the property were to remain undeveloped, there would be no requirement to conduct an equivalent amount of fuel reduction. Under a "No Action" alternative, the strategic ridgeline on Ben Bolt Ridge would not

have the approximate 60 foot fuelbreak that will result from the fuel reduction along Victoria Way and the emergency road to the northwest of the existing terminus of Victoria Way (20 feet clearance on each side of Victoria Way plus cleared road surface of approximately 20 feet = 60 foot wide fuelbreak.)

FIRE PLAN LIMITATIONS:

The Wildland Fire Safe Plan for the proposed Rancho Victoria subdivision cannot guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures and maintenance of the modified vegetation will greatly reduce the exposure of homes to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowners' attention to aid in home wildfire safety.

The fire history of the area and the awareness of the prevailing wind patterns coming from the southwest, suggest that the protection of the project area will be most important on the west of the project along Settler's Trail. Vegetation treatment along that thoroughfare will be important.

Landowner Responsibilities for Vegetation Management

By May 1st of each year, all landowners must take responsibility for fire hazard reduction as per PRC 4291 and EDH Ordinance 2023-01 in the following areas:

1. Roadside/driveways - Maintenance of roadside vegetation along road and driveway frontage to a 2 inch height for a distance of 20 feet from the edge of the road surface
2. Within 30 feet of a legal structure (Zone 1) – Remove all dead plants, grass and weeds.
3. Within 100 feet of a legal structure (Zone 2) – Remove dead or dry leaves and dead/dry vegetation from the yard, roof and gutters (see Appendix L, page 60)
4. Trees – plant trees that are considered fire resistant (see list, Appendix P on page 106) and prune lower branches to a minimum height of 6 feet, leaving a live crown that is no less than 50% of the total height of the tree (Standard forestry specification)

In the spring of each year the grassy annual roadside vegetation will start to grow alongside of Victoria Way, Settler's Trail. The roadside vegetation along all roads and driveways for which the current and future Rancho Victoria landowners are responsible will need to be reduced to two (2) inches in height and for a distance of 20 feet from the edges of the road surface. New roads that access proposed lots A-1, A-2, A-3 & A-4 and the extension of Victoria Way shall be at least 24 feet wide (two 10 foot travel lanes) with twenty (20) foot clearing on each side of the road, extending from the edge of the road surface. This can be accomplished by mowing, discing, herbicide application or by using prescribed grazing. Prescribed grazing will only be an option where fencing exists or is built to contain the livestock. The Rainbow Meadows Homeowners Association has responsibility for the fuel reduction along the west side of Settler's Trail. The east side of Settler's Trail shall have the roadside fuels maintained by landowners that purchase lots (A-1 through A-4) proposed by this subdivision. An emergency access road constructed to 2023 State Minimum Fire Safe Regulations from Settler's Trail, along the western boundary of proposed lots A-4, A-6, A-7 and thence east along the north boundary of lot A-7 to an extension of the existing Victoria Way between lots A-7 and A-8. The responsibility for vegetation management for 20 feet along the edge of that access road shall fall to the respective landowners along that road. As per EDH Ordinance 2023-01, vegetation within 20 feet of the boundary of the Forest Preserve and any

structure on Lots A-8 and A-5 shall be removed or cut to a height of 2 inches by May 1 of each year. If structures are constructed on Parcel A-8 that are less than 100 feet horizontal distance from the boundary of A-8 or A-5 with the Oak Preservation Area, fuel reduction shall extend into the Oak Preservation Area sufficient to accomplish the 100-foot fuel reduction standard required by PRC 4291. The clearing of vegetation into the Oak Preservation Area shall be accomplished by the landowner of the Oak Preservation Area and is required by County Ordinance 8.09.070.

All the proposed parcels are at least 40 acres in size. While the state and county and EDHFD have the authority to require fire hazard reduction measures within 30 feet and 100 feet of structures and within 20 feet of the edge of roads, the non-building space and forest preserve areas do not have requirements for vegetation management/fuel hazard reduction except as specified by County Ordinance 8.09.070. As an example, a theoretical 150 foot radius area around a home site plus a 600 foot driveway cleared on two sides for a width of 40 feet would result in approximately 2.5 acres of land which would be treated for fuel reduction, as per PRC 4291 and EDH Ordinance 2023-1. That leaves approximately 37 – 47 acres of land that would not be required to have fuel reduction conducted on it. It would be wise if the homeowner's association could contract with a local rancher to have livestock graze on the non-building acreage & forest reserve area or to have a program of prescribed fire applied to the non-building areas on a periodic basis. And to reiterate, if a landowner builds a structure that is less than 100 feet from the boundary of another ownership, the 100-foot fuel reduction required by PRC 4291 shall extend into the adjacent property and shall be the responsibility of the landowner on which the extension exists (County Code 8.09.070).

Driveways & Gates

Driveways will vary in length depending on the actual siting of the residence. Driveway minimum specifications are detailed under State Minimum Fire Safe Regulations (Appendix G, page 27) as follows:

a Turnarounds are required on driveways and roads that are longer than 150 feet in length as per the California Fire Code...

b. The minimum turning radius for a turnaround shall be forty (40) feet, not including parking. If a hammerhead/T is used instead, the top of the "T" shall be a minimum of sixty (60) feet in length.

c. As per CFC, Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the Driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.

d. Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

e. A turnaround shall be provided on driveways over 150 feet in length and shall be within fifty (50) feet of the building (see Firesafe Driveway Specifications, Appendix F, page 23). .As per 14CCR 1273.01(c), all driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane, fourteen (14) of horizontal clearance and unobstructed vertical clearance of thirteen feet, six inches (13'6"). The length of the driveway shall only be an issue if property owners plant trees along their driveway. In this event, the vertical clearance (branch height) shall be 15', unless the trees are less than 30 feet tall. Trees less than 30 feet in height shall be pruned such that no less than 50% of their live crown is removed.(professional forestry standard). In addition to the turnout/s, a turnaround shall be installed at the new residence at the time of construction. The turnaround shall either be circular or hammerhead (see 14 CCR, Div. 1.5, Chapter 7, subchapter 2, Articles 1-5 in Appendix G, page 27).

Gate proposals shall be submitted for approval prior to installation and shall be in accordance with EDHFD Standard B-002. A residential gate with opener may be installed in compliance with 14CCR 1273.09 (Appendix G, page 27). A gate shall be 2' wider than the driveway. If installed, it shall comply with an automatic opener. The opener must meet the requirements of El Dorado Hills Fire Department (EDHFD) under Fire Protection Standard B-002 Automatic Gates on Fire Access Roads. The future parcel owners are responsible for obtaining a current version of this standard, as it is periodically updated.

A Fuel Hazard Reduction Zone (FHRZ) along both sides of the driveway to the new residence shall be constructed and annually maintained. Maintenance shall consist of reducing the height of vegetation to 2 inches or less. This FHRZ shall be 10' wide along each side. Landscaping within this zone is permissible. All trees overhanging the driveway shall be pruned to provide 15' of vertical clearance, except where young trees are less than 30 feet in height. A FHRZ of 20' along South Shingle Road, Victoria Way and Settler's Trail shall also be established and annually maintained. All new driveways shall meet the 75,000 pound weight requirement for emergency vehicles as specified in the California Fire Code. All construction shall be in conformance with El Dorado County Department of Transportation (DOT) and EDHFD requirements.

All new home construction shall meet the Residential Building Code requirement for 7A construction since this project is within State Responsibility Area (SRA) and the EDHFD. Each new residence is required to have a National Fire Protection Association (NFPA) 13D residential fire sprinkler system.

The topography and wildland fuels necessitate that all unimproved parcels, dwellings and accessory structures comply with El Dorado County Chapter 8.09 (Hazardous Vegetation and Defensible Space), El Dorado Hills County Water District Ordinance 2023-01 (Hazardous Vegetation Management on Unimproved Parcels), California Public Resources Code (PRC) 4291, and California Government Code Section 51182 (Defensible Space Regulations). All flashy fuels (grass) shall be cut to a 2" stubble or disked. It is essential that the fuel reduction be done by May 1st annually and maintained throughout the declared fire season.

Fire Safe Requirements

• A. Fuel Hazard Reduction Zones shall be installed and annually maintained along the road and driveway/s. This zone is to be a minimum of 20' on both sides of the driveway and along the front of the property adjacent to the street. Vegetation within the 20-foot zone shall be removed or cut to a maximum 2 inch height. This zone shall be maintained regularly by May 1 each year.

• B. Trees over 30 feet in height along driveways and roads shall be pruned up 15' so there are no overhanging limbs. Trees planted along a driveway should be set back far enough to avoid tree crowns from overhanging the driveway and potentially impeding emergency vehicle passage.

• C. Any brush pile created during construction shall have a minimum of 10' of clearance. Brush piles need to be disposed.

• D. Clearance around all new house sites shall be 30' for Zone 1 (lean, clean & green. Remove all dead plants, grass and weeds and dry leaves. Prune tree branches at least 10 feet from the structure. Within 100 feet (Zone 2), cut or mow annual grass down to a maximum height of 4

inches, create horizontal spacing between shrubs and trees and create vertical spacing between grass, shrubs and trees. All clearance shall be annually maintained by May 1 annually. (see Appendix L, Page 60)

• E. Any new residence shall be required to comply with the Wildland-Urban Interface 7A Residential Building Code for State Responsibility Areas (SRA) and EDHFD Standard 7.

• F. All new residences shall have a NFPA 13D fire sprinkler system engineered and installed by a licensed contractor and comply with NFPA 1142.

• G. Driveways shall be constructed to a 12' width to the Fire Safe standards and as required by Department of Transportation.

• H. All residential gates must be inset from the roadway at least 30' and be 2' wider than the driveway. Gates require the approval of the EDHFD prior to installation and may be required to have an automatic opener that meets the specifications of County Fire. Refer to El Dorado Hills Fire Department Standard #B-002.

• I. Turnouts are to be constructed and have the roadside vegetation within 20 feet annually maintained (by May 1) to the standards specified by the Fire Safe Regulations adopted by El Dorado Hills Fire Department.

• J. The home/property owners are responsible for any future fire safe or building code changes adopted by the state or EDHFD as warranted.

All dwellings constructed within State Responsibility Areas (SRA) are to provide a thirty-foot (30') fire safe setback from the property lines, as per PRC 4291, or provide an approved mitigation measure (14CCR, Article 5, Section 1276.01, Appendix G, page 27)

• K. All new residences will be required to comply with the El Dorado County Regional Fire Protection Standard #D-003, Fire Water Supply without a Purveyor. Due to the High Fire Hazard Severity Zone, a minimum of 5,000 gallons will be required. Domestic use and the needs of the fire sprinkler system will be in addition to the above water requirement amount.

*L. All fences adjacent to non-irrigated open space shall be constructed of non-combustible materials.

*M. The established Victoria Way home owner's association shall maintain and repair Victoria Way, a private road. (South Shingle is a county-maintained road). The portion of Settler's Trail that provides access to proposed parcels A-1, A-2, A-3 & A-4 shall have a proportionate road maintenance responsibility borne by the landowners of those four parcels.

*N. Vegetation that is overgrowing any roadway shall be removed to a vertical height of fifteen (15) feet or a width of twenty (20) feet by the landowners adjacent to the road to the center line.

*O. Maintenance, repair, and/or replacement of NO PARKING-FIRE LAND signage or striping shall be the responsibility of the home owner's association.

*P. Other than the gate on Victoria Way, no other gates shall be constructed.
*Q. On un-improved parcels, all hazardous vegetation shall be removed to provide defensible space within one hundred (100) feet from structures that are larger than 120 square feet and twenty (20) feet along roadways. This includes parcels approved as a part of this subdivision project that are not built upon. This also includes the Oak Preservation Area where structures are within 100 feet of the boundary of that area. There is no requirement to provide clearance along Latrobe Road, as the property boundary for this project is greater than 20 feet from the county road.

Approval of the Wildland Fire Safe Plan does not guarantee approval of the project.

Conclusion

The Rancho Victoria Wildland Fire Safe Plan takes into account of the existing vegetative and topographical features of the project area and incorporates county and state requirements to guide the development of the property. The wildfire safety measures incorporated into this plan will compliment and become part of the development design. This Plan contains measures for providing and maintaining defensible space around future homes and open space. This plan incorporates implementation measures that are standard for High Fire Severity Zones and these measures must be maintained in order to assure adequate wildfire protection. All homeowners who live in and adjacent to areas where wildfire risk exists must take personal responsibility for ensuring their homes have reduced risk from wildfire and take responsibility for maintaining fuel reduction in the area surrounding their homes. The fire services will be a community partner providing homeowners with technical assistance as well as fire response, but the effort to reduce risk from wildfire must be shared by the homeowners and the fire services.

Appendices

	Page(s)
A. Project Vicinity Map	15
B. Tentative Subdivision Map	17
C. Slope Analysis Map	19
D. Preliminary Pad Location & Grading Detail Map	21
E. Topographic Map showing Vegetation Types	23
F. Highly Flammable Vegetation List	25
G. State Minimum Fire Safe Regulations	27-41
H. Well Map	43
I. Well Completion Reports	45-53
J.. Topographic Map showing Pond & Pool locations & Fuelbreak	55
K Fire History Map & Fire Name List	57-58
L.. CalFire "Ready For Fire" Diagram	60
M. Memorandum of Understanding County of El Dorado and El Dorado County Water District	62-65
N. Residential Setback for Structure Defensible Space – EDHFD Standard 7	67-90
O. Ordinance 2023-1 – El Dorado County/EDHFD	92-105
P. List of Fire Resistant Trees	106
Q Fire Hazard Severity Zone Table	107

Proposed Rancho Victoria Subdivision

Township 8 North, Range 9 East, Sections 4, 8, 9 MDB&M
Latrobe & Folsom S.E. 7.5' Quadrangles
El Dorado County

Approximate Project Location

Approx. Scale

0 2100 ft.

*Figure not OCR compatible.

15

Appendix B

Tentative Subdivision Map

TENTATIVE SUBDIVISION MAP
RANCHO VICTORIA

BEING A DIVISION OF PARCEL A PER PM 52-8
BEING A PORTION OF THE SW 1/4 SECTION 4, THE NE, SE AND SW 1/4 SECTION 8 AND THE NE, SW AND NW 1/4 SECTION 9, T. 8 N., R. 9 E., M. D. M.
COUNTY OF EL DORADO, STATE OF CALIFORNIA

Scale: 1" = 400' | TOMA & ASSOCIATES INC. ENGINEERING - SURVEYING - PLANNING 41 Summit Street Jackson, CA 95642 (209) 223-0156 | November, 2023

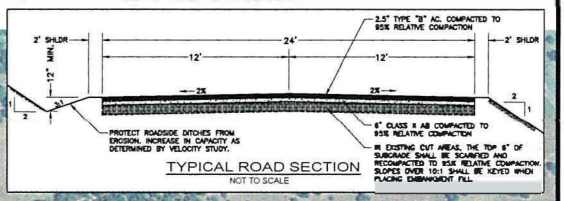
GENERAL NOTES AND STATEMENTS

1	RECORD OWNER	KILLEEN 401 LLC a Delaware Limited Liability Co ATTN: STEFAN SOLOVIEV 4250 VICTORIA WAY SHINGLE SPRINGS, CA 95682 (530) 305-6708
	APPLICANT	BEVIER STRUCTURAL ENGINEERING ATTN: JEFF KOVACH, PROJECT MGR 2479 SUNRISE BOULEVARD GOLD RIVER, CA 95670 (530) 305-6708
2	PREPARED BY	TOMA and ASSOCIATES LICENSED LAND SURVEYORS 41 SUMMIT STREET JACKSON, CA 95642 (209) 223-0156
3	SCALE	1" = 400'
4	CONTOUR INTERVAL	2 FEET
5	SOURCE OF TOPOGRAPHY	TOPOGRAPHIC AERIAL SURVEY
6	ASSESSOR'S PARCEL No.	087-010-043
7	PRESENT ZONING	RL-40
8	GENERAL PLAN	RR
9	TOTAL AREA	513.93 ACRES
10	PROPOSED LOTS	8 PARCELS RANGING FROM 40 ACRES TO 219.58± ACRES
11	MINIMUM LOT SIZE	MINIMUM LOT SIZE IS 40 ACRES
12	WATER	INDIVIDUAL WELLS (1 EXISTING 7 PROPOSED)
13	SEWAGE DISPOSAL	INDIVIDUAL SEPTIC SYSTEMS (1 EXISTING 7 PROPOSED)
14	FIRE PROTECTION	EL DORADO HILLS FIRE DEPARTMENT
15	FLOOD ZONE	NO PORTION OF THIS PROJECT LIES WITHIN AN AREA SUBJECT TO FLOOD WATER INUNDATION BY THE 100-YEAR FLOOD AND IS WITHIN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP FOR EL DORADO COUNTY, CALIFORNIA DATED SEPTEMBER 26, 2008 PANELS 950 AND 975 OF 1125 MAP No. 06017C0950E AND 06017C0975E
15	FIRE HAZARD ZONE	THIS PROJECT LIES WITHIN THE HIGH FIRE HAZARD SEVERITY ZONE IN STATE RESPONSIBILITY AREA AS SHOWN ON CALFIRE MAP FHSZ DATED 11-21-2022

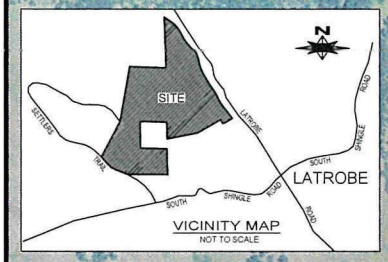
Scale: 1" = 400'
Contour Interval: 2'
0 400 800

THE FOLLOWING EASEMENTS ARE NOTED IN PRELIMINARY REPORT TITLE No. 34-257141 PREPARED BY STEWART TITLE OF PLACER AND DATED OCTOBER 28, 2021 AS AFFECTING THIS PROPERTY (SEE SAID PRELIMINARY REPORT FOR COMPLETE LIST OF EXCEPTIONS)

Y-DEEDS-251	100' WIDE RAILROAD EASEMENT CONDITIONS INCIDENTALS CENTRAL PACIFIC RR CO
6-RS-94	EASEMENTS/NOTES SHOWN ON FINAL MAP
2004-13065	EASEMENT AGREEMENT LATROBE SCHOOL DISTRICT
2006-51773	NOTICE OF RESTRICTION
NO DOC REF	RIGHTS TO POLE LINE OVER SOUTHERLY POR. PARCEL 10
51-PM-65	EASEMENTS/NOTES SHOWN ON FINAL MAP
2017-11861	OPTION AGREEMENT
2017-11862	OAK WOODLAND HABITAT PRESERVATION DECL OF ANNEXATION RECORDED 2020-43393
52-PM-8	PROVISIONS AND CONDITIONS PER "NOTES"
2019-37624	ROAD AND PUE GONZALES TRUST
2020-74047	CC AND R's AMENDED PER 2020-77001 2021-40207 2021-41720 AND 2021-54544
2020-77003	WELL AND INCIDENTALS VONDERWERTH



TYPICAL ROAD SECTION
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

	ADJACENT OWNERS
A	PARCEL D PER 23 PM 127 MOKANU, ET AL DOC. 2020-71955
B	PARCEL 17 PER 22 PM 76 LANUEWA / PADWAL DOC. 2018-2783
C	PARCEL A PER 34 PM 90 HANSEN / SPARKS DOC. 2019-36746

	DATA TABLE
1	S 56°09'35" E 453.82'
2	R=1541.82' D=26°18'10" L=708.16' CH=S 42°58'56" E 701.95'
3	S 29°50'24" E 265.90'
4	R=1482.47' D=14°03'24" L=363.70' CH=S 36°52'06" E 362.79'
5	S 43°53'48" E 436.75'
6	R=1096.81' D=30°14'35" L=579.16' CH=S 28°45'01" E 572.44'
7	S 13°36'13" E 294.58'
8	R=1482.47' D=11°09'56" L=288.93' CH=S 22°37'03" E 464.54' (TOTAL 8 TO 9)
9	R=1482.47' D=06°51'41" L=177.53'
10	S 31°37'54" E 626.66'
11	R=1577.96' D=06°54'02" L=190.05' CH=S 28°04'50" E 189.93'
12	S 36°31'56" E 168.73'
13	R=1382.47' D=10°28'34" L=252.77' CH=S 31°17'39" E 252.42'
14	S 26°03'22" E 313.86'
15	R=1956.81' D=11°59'08" L=410.00' CH=S 34°02'57" E 409.25'
16	S 40°02'31" E 400.00'
17	S 49°57'29" W 10.00'
18	S 40°02'31" E 336.02'
19	S 56°06'33" W 433.27'
20	S 71°10'28" W 143.06'
21	N 26°50'36" W 208.24'

PLANNING COMMISSION: APPROVAL / DENIAL ____ DATE ____
BOARD OF SUPERVISORS: APPROVAL / DENIAL DATE: ____

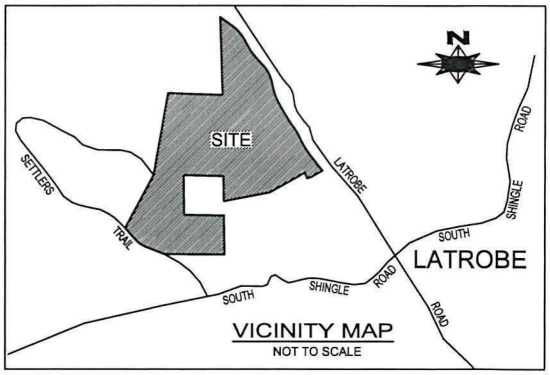
17

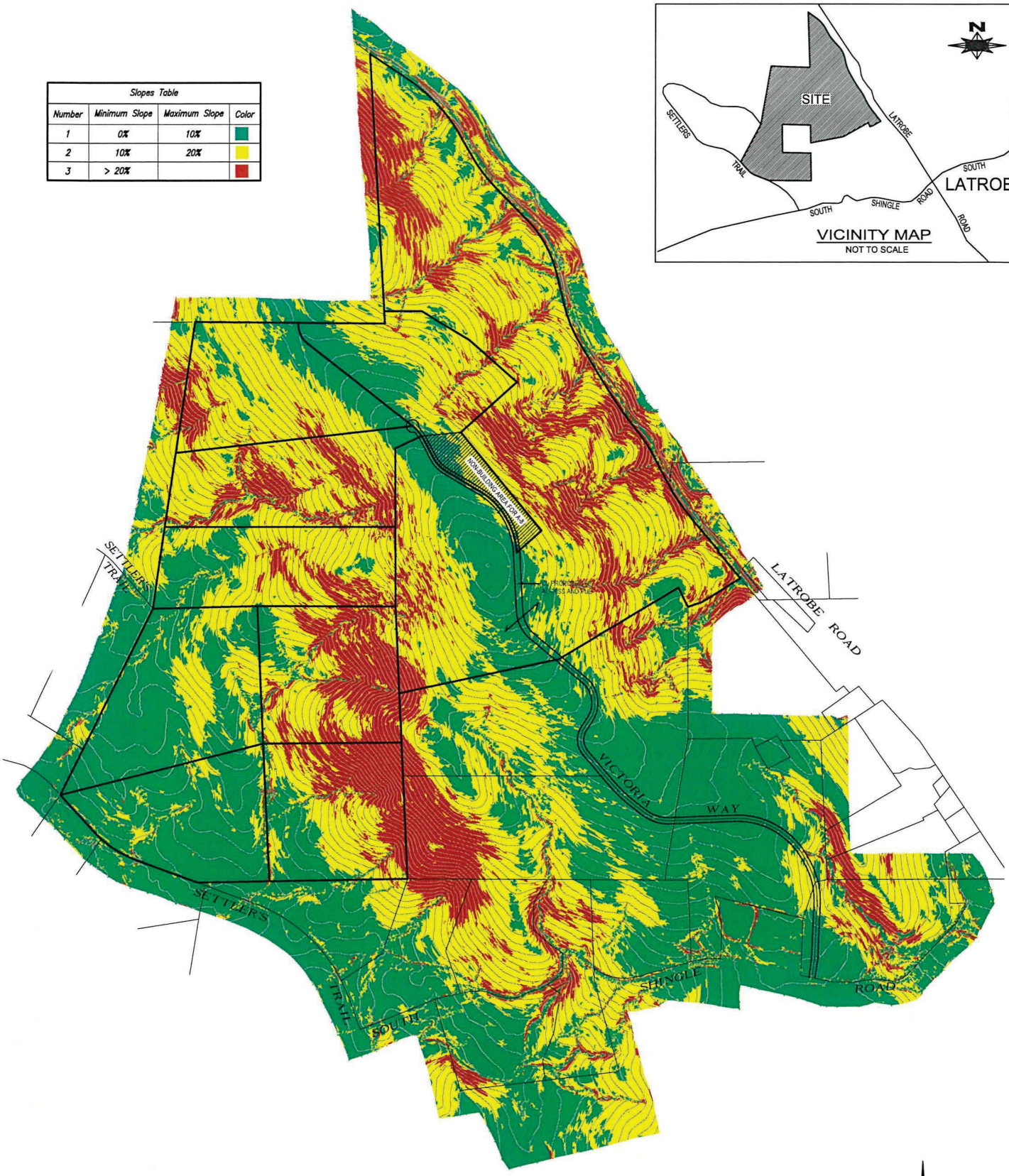
*Figure not OCR compatible.

Appendix C

Slope Analysis Map

Slopes Table			
Number	Minimum Slope	Maximum Slope	Color
1	0%	10%	
2	10%	20%	
3	> 20%		





KILLEEN 401, LLC

SLOPE ANALYSIS MAP

BEING A DIVISION OF PARCEL A PER PM 52-8
BEING A PORTION OF THE SW 1/4 SECTION 4, THE NE, SE AND SW 1/4 SECTION 8
AND THE NE, SW AND NW 1/4 SECTION 9, T. 8 N., R. 9 E., M. D. M.
COUNTY OF EL DORADO, STATE OF CALIFORNIA

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

November, 2021

19

N
2101-01

0' 600' 1200' 1800'

Scale: 1" = 600'
Contours @ 10' Intervals

C:\Users\Mike\Documents\Jobs\2021\2101-01 - Dynamic Trades - Dynamic Trades\Engineering\Drawings\2101-01 - Slope Analysis - 11-22-21.dwg, SHEET 1 - COVER, 11/23/2021 10:31:24 AM

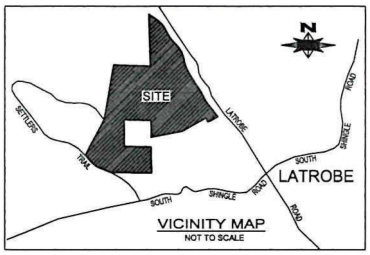
Appendix D

Preliminary Pad and Grading Detail Map

RANCHO VICTORIA

PRELIMINARY PAD LOCATION AND GRADING DETAIL

BEING A DIVISION OF PARCEL A PER PM 52-8
BEING A PORTION OF THE SW 1/4 SECTION 4, THE NE, SE AND SW 1/4 SECTION 8 AND THE NE, SW AND NW 1/4 SECTION 9, T. 8 N., R. 9 E., M. D. M.
COUNTY OF EL DORADO, STATE OF CALIFORNIA



TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street Jackson CA 95642
(209) 223-0160

Scale: 1" = 400'
Contour Interval: 10'
0 400 800

KEYWAY DETAIL
PLACEMENT OF FILL ON NATURAL SLOPE
WHERE EXISTING SLOPES ARE STEEPER THAN 5:1 (20%) AND OVER 5' IN HEIGHT (h)
NOT TO SCALE

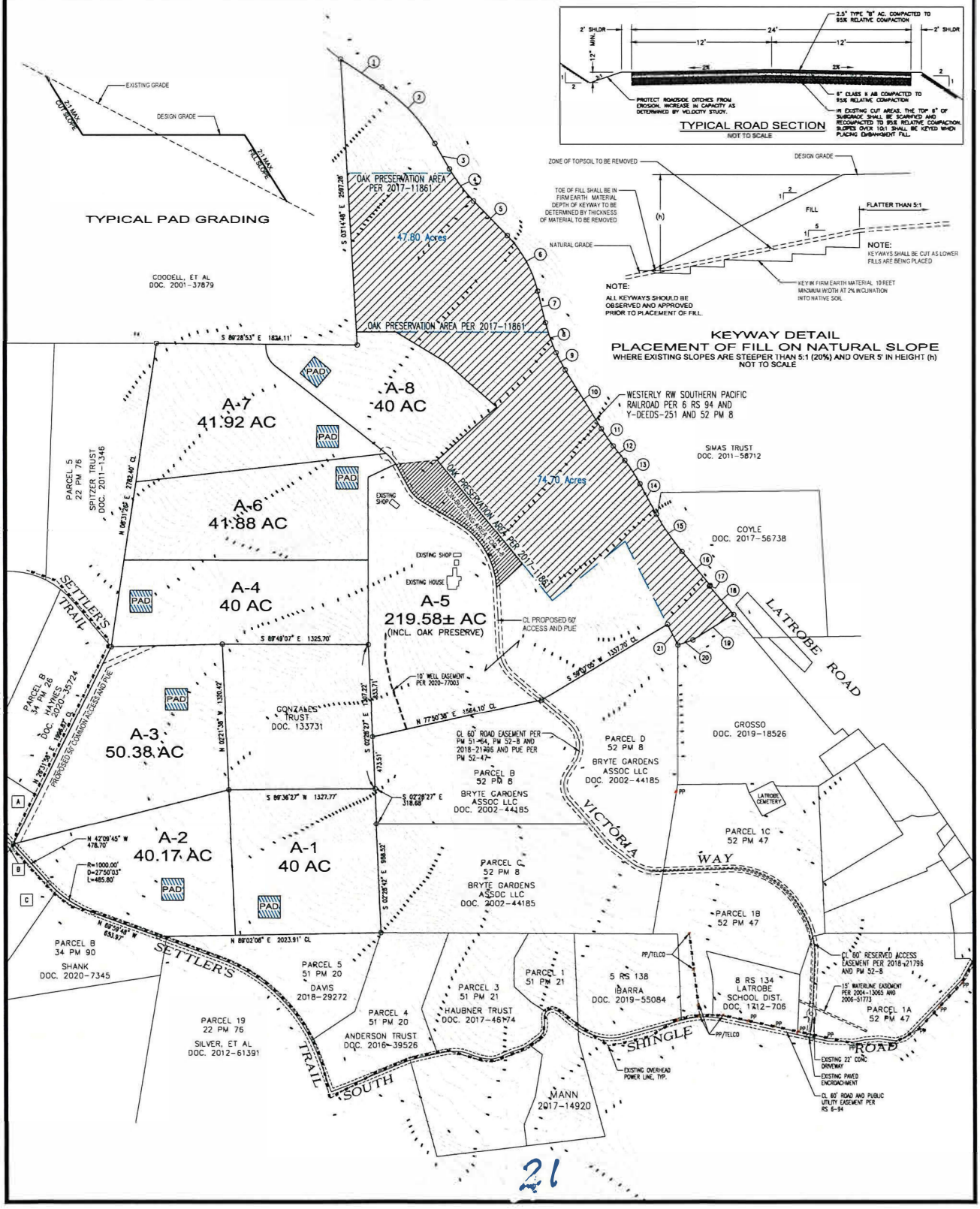


*Figure not OCR compatible.

Appendix E

Project Topographic Map

Showing Vegetation Types

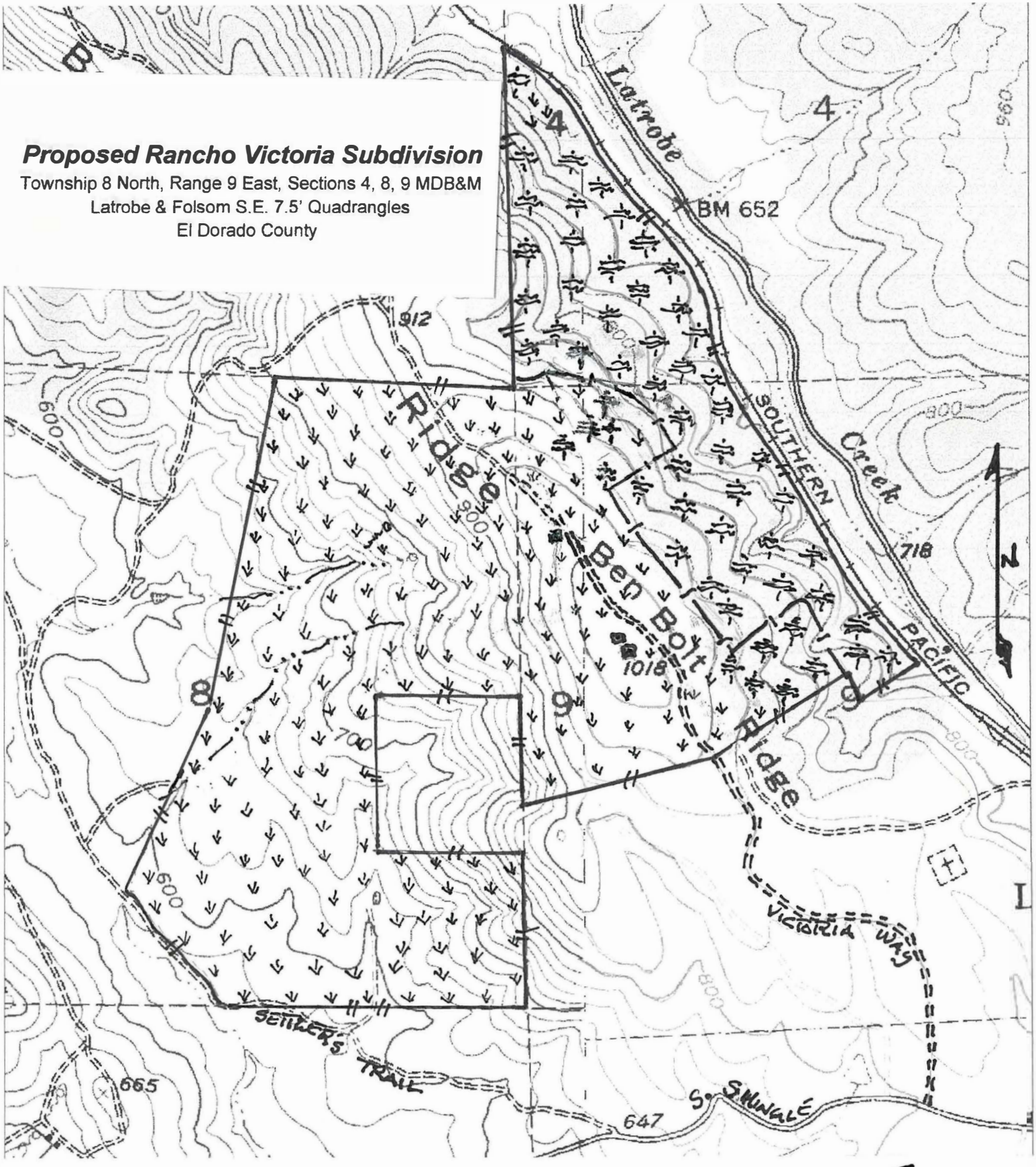


*Figure not OCR compatible.

23

Appendix F

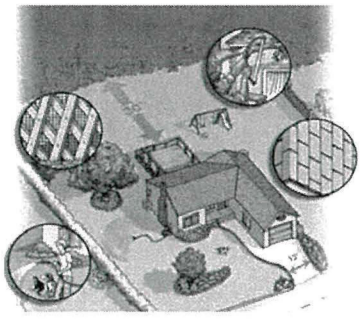
List of Flammable Plants

Highly Flammable Trees & Vegetation

It is advised that these trees and vegetation be removed from the defensible space area around structures.

Trees:

Acacia
Arboritae California Bay
Arizona Cypress
Bald Cypress
Blue Gum
Cedar
Cryptomeria
Cypress
Eucalyptus
Pine
Hemlock
Italian Cypress
Juniper
Larch
Leyland Cypress
Manna Gum
Palm (when left untrimmed)
Palm Pine
Pepper Tree
Fir
Red Cedar
Spruce
Sugar Gum
Tamarisk
Wax Myrtle Cabbage Palm
Yew



Grasses, Shrubs, Ground Cover

Algerian Ivy
American Holly
Bamboo
Black Sage
Boxwood
Brooms
California buckwheat
California sagebrush
Chamise or greasewood
Deer Grasses
Dry annual Grasses
Fountain Grasses
Gallberry Holly
Hopseed Bush
Juniper
Laurel sumac
Coyote Brush
Manzanita
Melaleuca
Pampas Grass
Pine straw
Podocarpus
Red Shanks
Rosemary
Salal
Saw Palmetto
Scotch broom
Scrub oak
Spanish broom
Sugar bush
Toyon
Wax Myrtle
Yaupon Holly

*These plants are among those known for the amount of dead fuel that accumulates in them, and high oil, high resin, or low moisture content of their leaves and branches

**All plants are flammable if not pruned periodically and the risk attached to any one plant can be greatly diminished with maintenance.

Appendix G

State Minimum Fire Safe Regulations

14 CCR Division 1.5, Chapter 7

UNOFFICIAL COPY

State Minimum Fire Safe Regulations

Board of Forestry and Fire Protection

FOR INFORMATIONAL USE ONLY
View the official California Code of Regulations online at
govt.westlaw.com/calregs

As of April 1, 2023

California Code of Regulations
Title 14 Natural Resources
Division 1.5 Department of Forestry
Chapter 7 - Fire Protection
Subchapter 2 State Minimum Fire Safe Regulations
Articles 1-5

UNOFFICIAL COPY

Contents

Article 1 Administration 3
§ 1270.00. Title 3
§ 1270.01. Definitions 3
§ 1270.02. Purpose 5
§ 1270.03. Scope 5
§ 1270.04. Provisions for Application of these Regulations 6
§ 1270.05. Local Regulations 6
§ 1270.06. Inspections 6
§ 1270.07. Exceptions to Standards 7
§ 1270.08. Distance Measurements 7
Article 2 Ingress and Egress 8
§ 1273.00. Intent 8
§ 1273.01. Width. 8
§ 1273.02. Road Surface 8
§ 1273.03. Grades 8
§ 1273.04. Radius 8
§ 1273.05. Turnarounds 8
§ 1273.06. Turnouts 9
§ 1273.07. Road and Driveway Structures 9
§ 1273.08. Dead-end Roads 10
§ 1273.09. Gate Entrances 10
Article 3 Signing and Building Numbering 11
§ 1274.00. Intent 11
§ 1274.01. Road Signs. 11
§ 1274.02. Road Sign Installation, Location, and Visibility. 11
§ 1274.03. Addresses for Buildings. 11
§ 1274.04. Address Installation, Location, and Visibility. 11
Article 4 Emergency Water Standards 12
§ 1275.00. Intent 12
§ 1275.01. Application 12
§ 1275.02. Water Supply. 12
§ 1275.03. Hydrants and Fire Valves. 12
Article 5 Building Siting, Setbacks, and Fuel Modification 13
§ 1276.00 Intent 13
§ 1276.01. Building and Parcel Siting and Setbacks 13
§ 1276.02. Ridgelines 14
§ 1276.03. Fuel Breaks 14
§ 1276.04 Greenbelts, Greenways, Open Spaces and Parks 15
§ 1276.05 Disposal of Flammable Vegetation and Fuels 15

Article 1 Administration

§ 1270.00. Title

Subchapter 2 shall be known as the "State Minimum Fire Safe Regulations," and shall constitute the minimum Wildfire protection standards of the California Board of Forestry and Fire Protection.

§ 1270.01. Definitions

The following definitions are applicable to Subchapter 2.
(a) Agriculture: Land used for agricultural purposes as defined in a Local Jurisdiction's zoning ordinances.
(b) Board: California Board of Forestry and Fire Protection.
(c) Building: Any Structure used or intended for supporting or sheltering any use or Occupancy, except those classified as Utility and Miscellaneous Group U.
(d) CAL FIRE: California Department of Forestry and Fire Protection.
(e) Dead-end Road: A Road that has only one point of vehicular ingress/egress, including cul-de-sacs and Roads that loop back on themselves
(f) Defensible Space: The area within the perimeter of a parcel, Development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching Wildfire or defense against encroaching Wildfires or escaping Structure fires. The perimeter as used in this regulation is the area encompassing the parcel or parcels proposed for construction and/or Development, excluding the physical Structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, Road names and Building identification, and fuel modification measures.
(g) Development: As defined in section 66418.1 of the California Government Code.
(h) Director: Director of the Department of Forestry and Fire Protection or their designee.
(i) Driveway: A vehicular pathway that serves no more than four (4) Residential Units and any number of non-commercial or non-industrial Utility or Miscellaneous Group U Buildings on each parcel. A Driveway shall not serve commercial or industrial uses at any size or scale.
(j) Exception: An alternative to the specified standard requested by the applicant that may be necessary due to health, safety, environmental conditions, physical site limitations or other limiting conditions, such as recorded historical sites, that provides mitigation of the problem.
(k) Fire Apparatus: A vehicle designed to be used under emergency conditions to transport personnel and equipment or to support emergency response, including but not limited to the suppression of fires.
(l) Fire Authority: A fire department, agency, division, district, or other governmental body responsible for regulating and/or enforcing minimum fire safety standards in the Local Jurisdiction.
(m) Fire Hydrant: A valved connection on a water supply or storage system for the purpose of providing water for fire protection and suppression operations.
(n) Fuel Break: A strategically located area where the volume and arrangement of vegetation has been managed to limit fire intensity, fire severity, rate of spread, crown fire potential, and/or ember production.
(o) Greenbelts: open space, parks, wildlands, other areas, or a combination thereof, as designated by Local Jurisdictions, which are in, surround, or are adjacent to a city or urbanized area, that may function as Fuel Breaks and where Building construction is restricted or prohibited.
(p) Greenways: Linear open spaces or corridors that link parks and neighborhoods within a community through natural or manmade trails and paths.

(q) Hammerhead/T: A "T" shaped, three-point Turnaround space for Fire Apparatus on a Road or Driveway, being no narrower than the Road or Driveway that serves it.
(r) Hazardous Land Use: A land use that presents a significantly elevated potential for the ignition, prolonged duration, or increased intensity of a Wildfire due to the presence of flammable materials, liquids, or gasses, or other features that initiate or sustain combustion. Such uses are determined by the Local Jurisdiction and may include, but are not limited to, power-generation and distribution facilities; wood processing or storage sites; flammable gas or liquids processing or storage sites; or shooting ranges.
(s) Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that approves or has the authority to regulate Development.
(t) Municipal-Type Water System: A system having water pipes servicing Fire Hydrants and designed to furnish, over and above domestic consumption, a minimum of 250 gpm (950 L/min) at 20 psi (138 kPa) residual pressure for a two (2) hour duration.
(u) Occupancy: The purpose for which a Building, or part thereof, is used or intended to be used.
(v) One-way Road: A Road that provides a minimum of one Traffic Lane width designed for traffic flow in one direction only.
(w) Residential Unit: Any Building or portion thereof which contains living facilities including provisions for sleeping, eating, cooking and/or sanitation, for one or more persons. Manufactured homes, mobile homes, and factory-built housing are considered Residential Units.
(x) Ridgeline: The line of intersection of two opposing slope aspects running parallel to the long axis of the highest elevation of land; or an area of higher ground separating two adjacent streams or watersheds.
(y) Road: A public or private vehicular pathway to more than four (4) Residential Units, or to any industrial or commercial Occupancy.
(z) Road or Driveway Structures: Bridges, culverts, and other appurtenant Structures which supplement the Traffic Lane or Shoulders.
(aa) Same Practical Effect: As used in this subchapter, means an Exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including:

(1) access for emergency wildland fire equipment,
(2) safe civilian evacuation,
(3) signing that avoids delays in emergency equipment response,
(4) available and accessible water to effectively attack Wildfire or defend a Structure from Wildfire, and
(5) fuel modification sufficient for civilian and fire fighter safety.

(bb) Shoulder: A vehicular pathway adjacent to the Traffic Lane.
(cc) State Responsibility Area (SRA): As defined in Public Resources Code sections 4126-4127; and the California Code of Regulations, title 14, division 1.5, chapter 7, article 1, sections 1220-1220.5.
(dd) Strategic Ridgeline: a Ridgeline identified pursuant to § 1276.02(a) that may support fire suppression activities or where the preservation of the Ridgeline as an Undeveloped Ridgeline would reduce fire risk and improve fire protection.
(ee) Structure: That which is built or constructed or any piece of work artificially built up or composed of parts joined together in some definite manner.
(ff) Traffic Lane: The portion of a Road or Driveway that provides a single line of vehicle travel.
(gg) Turnaround: An area which allows for a safe opposite change of direction for Fire Apparatus at the end of a Road or Driveway.
(hh) Turnout: A widening in a Road or Driveway to allow vehicles to pass.

(ii) Undeveloped Ridgeline: A Ridgeline with no Buildings.
(jj) Utility and Miscellaneous Group U: A Structure of an accessory character or a miscellaneous Structure not classified in any specific Occupancy permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.
(kk) Vertical Clearance: The minimum specified height of a bridge, overhead projection, or vegetation clearance above the Road or Driveway.
(*ll*) Vertical Curve: A curve at a high or low point of a Road that provides a gradual transition between two Road grades or slopes.
(mm) Very High Fire Hazard Severity Zone (VHFHSZ): As defined in Government Code section 51177(i).
(nn) Wildfire: Has the same meaning as "forest fire" in Public Resources Code Section 4103.

§ 1270.02. Purpose

(a) Subchapter 2 has been prepared and adopted for the purpose of establishing state minimum Wildfire protection standards in conjunction with Building, construction, and Development in the State Responsibility Area (SRA) and, after July 1, 2021, the Very High Fire Hazard Severity Zones, as defined in Government Code § 51177(i) (VHFHSZ).
(b) The future design and construction of Structures, subdivisions and Developments in the SRA and, after July 1, 2021, the VHFHSZ shall provide for basic emergency access and perimeter Wildfire protection measures as specified in the following articles.
(c) These standards shall provide for emergency access; signing and Building numbering; private water supply reserves for emergency fire use; vegetation modification, Fuel Breaks, Greenbelts, and measures to preserve Undeveloped Ridgelines. Subchapter 2 specifies the minimums for such measures.

§ 1270.03. Scope

(a) Subchapter 2 shall apply to:
(1) the perimeters and access to all residential, commercial, and industrial Building construction within the SRA approved after January 1, 1991, and those approved after July 1, 2021 within the VHFHSZ, except as set forth below in subsection (b).
(2) the siting of newly installed commercial modulars, manufactured homes, mobilehomes, and factory-built housing, as defined in Health and Safety Code sections 18001.8, 18007, 18008, and 19971;
(3) all tentative and parcel maps or other Developments approved after January 1, 1991; and
(4) applications for Building permits on a parcel approved in a pre-1991 parcel or tentative map to the extent that conditions relating to the perimeters and access to the Buildings were not imposed as part of the approval of the parcel or tentative map.
(b) Subchapter 2 does not apply where an application for a Building permit is filed after January 1, 1991 for Building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that conditions relating to the perimeters and access to the Buildings were imposed by the parcel map or final tentative map approved prior to January 1, 1991.
(c) Affected activities include, but are not limited to:
(1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d);
(2) application for a Building permit for new construction not relating to an existing Structure;

(3) application for a use permit;

(4) Road construction including construction of a Road that does not currently exist, or extension of an existing Road.

(d) The standards in Subchapter 2 applicable to Roads shall not apply to Roads used solely for Agriculture; mining; or the management of timberland or harvesting of forest products.

§ 1270.04. Provisions for Application of these Regulations

This Subchapter shall be applied as follows:

(a) the Local Jurisdictions shall provide the Director of the California Department of Forestry and Fire Protection (CAL FIRE) or their designee with notice of applications for Building permits, tentative parcel maps, tentative maps, and installation or use permits for construction or Development within the SRA, or if after July, 1 2021, the VHFHSZ.

(b) the Director or their designee may review and make fire protection recommendations on applicable construction or development permits or maps provided by the Local Jurisdiction.

(c) the Local Jurisdiction shall ensure that the applicable sections of this Subchapter become a condition of approval of any applicable construction or Development permit or map.

§ 1270.05. Local Regulations

(a) Subchapter 2 shall serve as the minimum Wildfire protection standards applied in SRA and VHFHSZ. However, Subchapter 2 does not supersede local regulations which equal or exceed the standards of this Subchapter.

(b) A local regulation equals or exceeds a minimum standard of this Subchapter only if, at a minimum, the local regulation also fully complies with the corresponding minimum standard in this Subchapter.

(c) A Local Jurisdiction shall not apply exemptions to Subchapter 2 that are not enumerated in Subchapter 2. Exceptions requested and approved in conformance with § 1270.07 (Exceptions to Standards) may be granted on a case-by-case basis.

(d) Notwithstanding a local regulation that equals or exceeds the State Minimum Fire Safe Regulations, Building construction shall comply with the State Minimum Fire Safe Regulations.

§ 1270.06. Inspections

Inspections shall conform to the following requirements:

(a) Inspections in the SRA shall be made by:

(1) the Director, or

(2) Local Jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) Local Jurisdictions where the inspection duties have been formally delegated by the Director to the Local Jurisdictions, pursuant to subsection (b).

(b) The Director may delegate inspection authority to a Local Jurisdiction subject to all of the following criteria:

(1) The Local Jurisdiction represents that they have appropriate resources to perform the delegated inspection authority.

(2) The Local Jurisdiction acknowledges that CAL FIRE's authority under subsection (d) shall not be waived or restricted.

(3) The Local Jurisdiction consents to the delegation of inspection authority.

(4) The Director may revoke the delegation at any time.

(5) The delegation of inspection authority, and any subsequent revocation of the delegation, shall be documented in writing, and retained on file at the CAL FIRE Unit headquarters that administers SRA fire protection in the area.

(c) Inspections in the VHFHSZ shall be made by the Local Jurisdiction.

(d) Nothing in this section abrogates CAL FIRE's authority to inspect and enforce state forest and fire laws in the SRA even when the inspection duties have been delegated pursuant to this section.
(e) Reports of violations within the SRA shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.
(f) When inspections are conducted, they shall occur prior to: the issuance of the use permit or certificate of Occupancy; the recordation of the parcel map or final map; the filing of a notice of completion; or the final inspection of any project or Building permit.

§ 1270.07. Exceptions to Standards

(a) Upon request by the applicant, an Exception to standards within this Subchapter may be allowed by the Inspection entity in accordance with 14 CCR § 1270.06 (Inspections) where the Exceptions provide the Same Practical Effect as these regulations towards providing Defensible Space. Exceptions granted by the Local Jurisdiction listed in 14 CCR § 1270.06, shall be made on a case-by-case basis only. Exceptions granted by the Local Jurisdiction listed in 14 CCR § 1270.06 shall be forwarded to the appropriate CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or the county in which the Local Jurisdiction is located and shall be retained on file at the Unit Office.
(b) Requests for an Exception shall be made in writing to the Local Jurisdiction listed in 14 CCR § 1270.06 by the applicant or the applicant's authorized representative.
At a minimum, the request shall state the specific section(s) for which an Exception is requested; material facts supporting the contention of the applicant; the details of the Exception proposed; and a map showing the proposed location and siting of the Exception. Local Jurisdictions listed in § 1270.06 (Inspections) may establish additional procedures or requirements for Exception requests.
(c) Where an Exception is not granted by the inspection entity, the applicant may appeal such denial to the Local Jurisdiction. The Local Jurisdiction may establish or utilize an appeal process consistent with existing local building or planning department appeal processes.
(d) Before the Local Jurisdiction makes a determination on an appeal, the inspector shall be consulted and shall provide to that Local Jurisdiction documentation outlining the effects of the requested Exception on Wildfire protection.
(e) If an appeal is granted, the Local Jurisdiction shall make findings that the decision meets the intent of providing Defensible Space consistent with these regulations. Such findings shall include a statement of reasons for the decision. A written copy of these findings shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in that Local Jurisdiction.

§ 1270.08. Distance Measurements

All specified or referenced distances are measured along the ground, unless otherwise stated.

Article 2 Ingress and Egress

§ 1273.00. Intent

Roads, and Driveways, whether public or private, unless exempted under 14 CCR § 1270.03(d), shall provide for safe access for emergency Wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a Wildfire emergency consistent with 14 CCR §§ 1273.00 through 1273.09.

§ 1273.01. Width.

(a) All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicle and civilian egress, unless other standards are provided in this article or additional requirements are mandated by Local Jurisdictions or local subdivision requirements. Vertical clearances shall conform to the requirements in California Vehicle Code section 35250.

(b) All One-way Roads shall be constructed to provide a minimum of one twelve (12) foot traffic lane, not including Shoulders. The Local Jurisdiction may approve One-way Roads.

(1) All one-way roads shall, at both ends, connect to a road with two traffic lanes providing for travel in different directions, and shall provide access to an area currently zoned for no more than ten (10) Residential Units.

(2) In no case shall a One-way Road exceed 2,640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each One-way Road.

(c) All driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane, fourteen (14) feet unobstructed horizontal clearance, and unobstructed vertical clearance of thirteen feet, six inches (13′ 6″).

§ 1273.02. Road Surface

(a) Roads shall be designed and maintained to support the imposed load of Fire Apparatus weighing at least 75,000 pounds, and provide an aggregate base.

(b) Road and Driveway Structures shall be designed and maintained to support at least 40,000 pounds.

(c) Project proponent shall provide engineering specifications to support design, if requested by the Local Jurisdiction.

§ 1273.03. Grades

(a) At no point shall the grade for all Roads and Driveways exceed 16 percent.

(b) The grade may exceed 16%, not to exceed 20%, with approval from the Local Jurisdiction and with mitigations to provide for Same Practical Effect.

§ 1273.04. Radius

(a) No Road or Road Structure shall have a horizontal inside radius of curvature of less than fifty (50) feet. An additional surface width of four (4) feet shall be added to curves of 50-100 feet radius; two (2) feet to those from 100-200 feet.

(b) The length of vertical curves in Roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.

§ 1273.05. Turnarounds

(a) Turnarounds are required on Driveways and Dead-end Roads.

(b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the "T" shall be a minimum of sixty (60) feet in length.
(c) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the Driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.
(d) A turnaround shall be provided on Driveways over 300 feet in length and shall be within fifty (50) feet of the building.
(d) Each Dead-end Road shall have a turnaround constructed at its terminus. Where parcels are zoned five (5) acres or larger, turnarounds shall be provided at a maximum of 1,320 foot intervals.
(e) Figure A. Turnarounds on roads with two ten-foot traffic lanes.
Figure A/Image 1 on the left is a visual representation of paragraph (b).
(f) Figure B. Turnarounds on driveways with one ten-foot traffic lane.
Figure B/Image 2 on the right is a visual representation of paragraph (b).

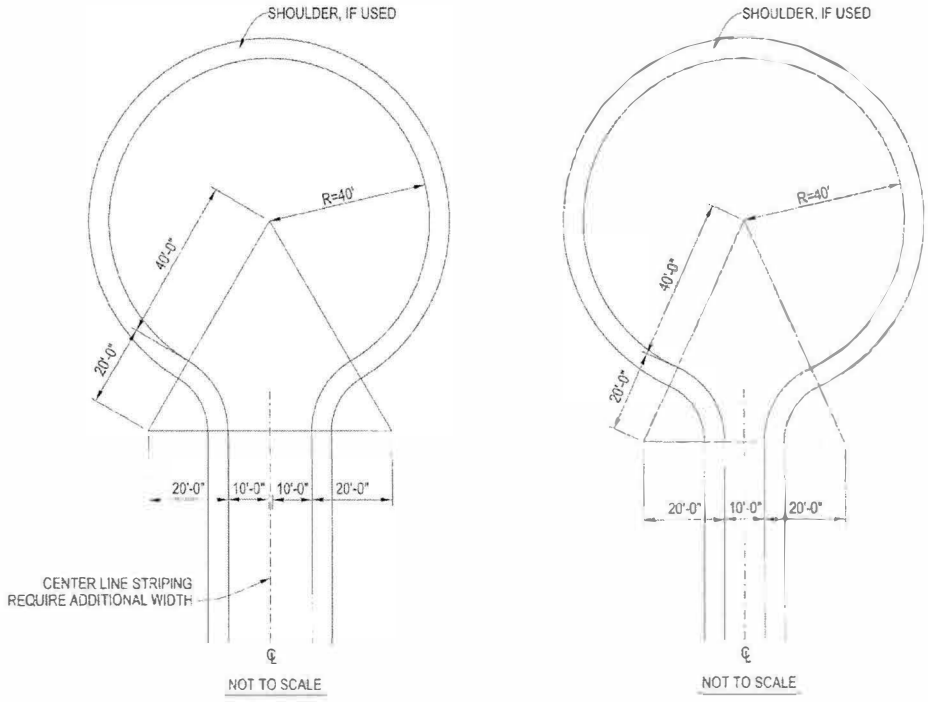


FIGURE FOR 14 CCR § 1273.05. TURNAROUND EXAMPLES
*Figure not OCR compatible.

§ 1273.06. Turnouts

Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

§ 1273.07. Road and Driveway Structures

(a) Appropriate signing, including but not limited to weight or vertical clearance limitations, One-way Road or single traffic lane conditions, shall reflect the capability of each bridge.
(b) Where a bridge or an elevated surface is part of a Fire Apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and

Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction.
(c) Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained.
(d) A bridge with only one traffic lane may be authorized by the Local Jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

§ 1273.08. Dead-end Roads

(a) The maximum length of a Dead-end Road, including all Dead-end Roads accessed from that Dead-end Road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:

parcels zoned for less than one acre - 800 feet
parcels zoned for 1 acre to 4.99 acres - 1,320 feet
parcels zoned for 5 acres to 19.99 acres - 2,640 feet
parcels zoned for 20 acres or larger - 5,280 feet

All lengths shall be measured from the edge of the Road surface at the intersection that begins the Road to the end of the Road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.
(b) See 14 CCR § 1273.05 for dead-end road turnaround requirements.

§ 1273.09. Gate Entrances

(a) Gate entrances shall be at least two (2) feet wider than the width of the traffic lane(s) serving that gate and a minimum width of fourteen (14) feet unobstructed horizontal clearance and unobstructed vertical clearance of thirteen feet, six inches (13′ 6″).
(b) All gates providing access from a Road to a Driveway shall be located at least thirty (30) feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that Road.
(c) Where a One-way Road with a single traffic lane provides access to a gated entrance, a forty (40) foot turning radius shall be used.
(d) Security gates shall not be installed without approval. Where security gates are installed, they shall have an approved means of emergency operation. Approval shall be by the local authority having jurisdiction. The security gates and the emergency operation shall be maintained operational at all times.

Article 3 Signing and Building Numbering

§ 1274.00. Intent

To facilitate locating a fire and to avoid delays in response, all newly constructed or approved Roads and Buildings shall be designated by names or numbers posted on signs clearly visible and legible from the Road. This section shall not restrict the size of letters or numbers appearing on road signs for other purposes.

§ 1274.01. Road Signs.

(a) Newly constructed or approved Roads must be identified by a name or number through a consistent system that provides for sequenced or patterned numbering and/or non-duplicative naming within each Local Jurisdiction. This section does not require any entity to rename or renumber existing roads, nor shall a Road providing access only to a single commercial or industrial Occupancy require naming or numbering.
(b) The size of letters, numbers, and symbols for Road signs shall be a minimum four (4) inch letter height, half inch (.5) inch stroke, reflectorized, contrasting with the background color of the sign.

§ 1274.02. Road Sign Installation, Location, and Visibility.

(a) Road signs shall be visible and legible from both directions of vehicle travel for a distance of at least one hundred (100) feet.
(b) Signs required by this article identifying intersecting Roads shall be placed at the intersection of those Roads.
(c) A sign identifying traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end roads, one-way roads, or single lane conditions, shall be placed:

(1) at the intersection preceding the traffic access limitation, and
(2) no more than one hundred (100) feet before such traffic access limitation.

(d) Road signs required by this article shall be posted at the beginning of construction and shall be maintained thereafter.

§ 1274.03. Addresses for Buildings.

(a) All Buildings shall be issued an address by the Local Jurisdiction which conforms to that jurisdiction's overall address system. Utility and miscellaneous Group U Buildings are not required to have a separate address; however, each Residential Unit within a Building shall be separately identified.
(b) The size of letters, numbers, and symbols for addresses shall conform to the standards in the California Fire Code, California Code of Regulations title 24, part 9.
(c) Addresses for residential Buildings shall be reflectorized.

§ 1274.04. Address Installation, Location, and Visibility.

(a) All buildings shall have a permanently posted address which shall be plainly legible and visible from the Road fronting the property.
(b) Where access is by means of a private Road and the address identification cannot be viewed from the public way, an unobstructed sign or other means shall be used so that the address is visible from the public way.
(c) Address signs along one-way Roads shall be visible from both directions.
(d) Where multiple addresses are required at a single driveway, they shall be mounted on a single sign or post.

(e) Where a Road provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest Road intersection providing access to that site, or otherwise posted to provide for unobstructed visibility from that intersection.
(f) In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter.

Article 4 Emergency Water Standards

§ 1275.00. Intent

Emergency water for Wildfire protection shall be available, accessible, and maintained in quantities and locations specified in the statute and these regulations in order to attack a Wildfire or defend property from a Wildfire.

§ 1275.01. Application

The provisions of this article shall apply in the tentative and parcel map process when new parcels are approved by the Local Jurisdiction.

§ 1275.02. Water Supply.

(a) When a water supply for structure defense is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when alternative methods of protection are provided and approved by the Local Jurisdiction.
(b) Water systems equaling or exceeding the California Fire Code, California Code of Regulations title 24, part 9, or, where a municipal-type water supply is unavailable, National Fire Protection Association (NFPA) 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting," 2017 Edition, hereby incorporated by reference, shall be accepted as meeting the requirements of this article.
(c) Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or man made containment structure, as long as the specified quantity is immediately available.
(d) Nothing in this article prohibits the combined storage of emergency Wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the local fire agency.
(e) Where freeze or crash protection is required by Local Jurisdictions, such protection measures shall be provided.

§ 1275.03. Hydrants and Fire Valves.

(a) The hydrant or fire valve shall be eighteen (18) inches above the finished surface. Its location in relation to the road or driveway and to the building(s) or structure(s) it serves shall comply with California Fire Code, California Code of Regulations title 24, part 9, Chapter 5, and Appendix C.
(b) The hydrant head shall be a two and half (2 1/2) inch National Hose male thread with cap for pressure and gravity flow systems and four and a half (4 1/2) inch for draft systems.
(c) Hydrants shall be wet or dry barrel and have suitable freeze or crash protection as required by the local jurisdiction.
§ 1275.04. Signing of Water Sources.
(a) Each hydrant, fire valve, or access to water shall be identified as follows:
(1) if located along a driveway, a reflectorized blue marker, with a minimum dimension of three (3) inches shall be located on the driveway address sign and mounted on a fire retardant post, or
(2) if located along a road,

(i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire retardant post. The sign post shall be within three (3) feet of said hydrant or fire valve, with the sign no less than three (3) feet nor greater than five (5) feet above ground, in a horizontal position and visible from the driveway, or
(ii) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

§ 1275.04. Signing of Water Sources.

(a) Each Fire Hydrant or access to water shall be identified as follows:
(1) if located along a Driveway, a reflectorized blue marker, with a minimum dimension of three (3) inches shall be located on the Driveway address sign and mounted on a fire retardant post, or
(2) if located along a Road,
(i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire retardant post. The sign post shall be within three (3) feet of said Fire Hydrant with the sign no less than three (3) feet nor greater than five (5) feet above ground, in a horizontal position and visible from the Driveway, or
(ii) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

Article 5 Building Siting, Setbacks, and Fuel Modification

§ 1276.00 Intent

To reduce the intensity of a Wildfire, reducing the volume and density of flammable vegetation around Development through strategic fuel modification, parcel siting and Building setbacks, and the protection of Undeveloped Ridgelines shall provide for increased safety for emergency fire equipment, including evacuating civilians, and a point of attack or defense from a Wildfire.

§ 1276.01. Building and Parcel Siting and Setbacks

(a) All parcels shall provide a minimum thirty (30) foot setback for all Buildings from all property lines and/or the center of a Road, except as provided for in subsection (b).
(b) A reduction in the minimum setback shall be based upon practical reasons, which may include but are not limited to, parcel dimensions or size, topographic limitations, Development density requirements or other Development patterns that promote low-carbon emission outcomes; sensitive habitat; or other site constraints , and shall provide for an alternative method to reduce Structure-to-Structure ignition by incorporating features such as, but not limited to:
(1) non-combustible block walls or fences; or
(2) non-combustible material extending five (5) feet horizontally from the furthest extent of the Building; or
(3) hardscape landscaping; or
(4) a reduction of exposed windows on the side of the Structure with a less than thirty (30) foot setback; or
(5) the most protective requirements in the California Building Code, California Code of Regulations Title 24, Part 2, Chapter 7A, as required by the Local Jurisdiction.

§ 1276.02. Ridgelines

(a) The Local Jurisdiction shall identify Strategic Ridgelines, if any, to reduce fire risk and improve fire protection through an assessment of the following factors:

(1) Topography;

(2) Vegetation;

(3) Proximity to any existing or proposed residential, commercial, or industrial land uses;

(4) Construction where mass grading may significantly alter the topography resulting in the elimination of Ridgeline fire risks;

(5) Ability to support effective fire suppression; and

(6) Other factors, if any, deemed relevant by the Local Jurisdiction.

(b) Preservation of Undeveloped Ridgelines identified as strategically important shall be required pursuant to this section.

(c) New Buildings on Undeveloped Ridgelines identified as strategically important are prohibited, as described in subsections (c)(1), (c)(2), and (c)(3).

(1) New Residential Units are prohibited within or at the top of drainages or other topographic features common to Ridgelines that act as chimneys to funnel convective heat from Wildfires.

(2) Nothing in this subsection shall be construed to alter the extent to which utility infrastructure, including but not limited to wireless telecommunications facilities, as defined in Government Code section 65850.6, subdivision (d)(2), or Storage Group S or Utility and Miscellaneous Group U Structures, may be constructed on Undeveloped Ridgelines.

(3) Local Jurisdictions may approve Buildings on Strategic Ridgelines where Development activities such as mass grading will significantly alter the topography that results in the elimination of Ridgeline fire risks.

(d) The Local Jurisdiction may implement further specific requirements to preserve Undeveloped Ridgelines.

§ 1276.03. Fuel Breaks

(a) When Building construction meets the following criteria, the Local Jurisdiction shall determine the need and location for Fuel Breaks in consultation with the Fire Authority:

(1) the permitting or approval of three (3) or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or

(2) an application for a change of zoning increasing zoning intensity or density; or

(3) an application for a change in use permit increasing use intensity or density.

(b) Fuel Breaks required by the Local Jurisdiction, in consultation with the Fire Authority, shall be located, designed, and maintained in a condition that reduces the potential of damaging radiant and convective heat or ember exposure to Access routes, Buildings, or infrastructure within the Development.

(c) Fuel Breaks shall have, at a minimum, one point of entry for fire fighters and any Fire Apparatus. The specific number of entry points and entry requirements shall be determined by the Local Jurisdiction, in consultation with the Fire Authority.

(d) Fuel Breaks may be required at locations such as, but not limited to:

(1) Directly adjacent to defensible space as defined by 14 CCR § 1299.02 to reduce radiant and convective heat exposure, ember impacts, or support fire suppression tactics;

(2) Directly adjacent to Roads to manage radiant and convective heat exposure or ember impacts, increase evacuation safety, or support fire suppression tactics;

(3) Directly adjacent to a Hazardous Land Use to limit the spread of fire from such uses, reduce radiant and convective heat exposure, or support fire suppression tactics;

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(4) Strategically located along Ridgelines, in Greenbelts, or other locations to reduce radiant and convective heat exposure, ember impacts, or support community level fire suppression tactics.

(e) Fuel Breaks shall be completed prior to the commencement of any permitted construction.

(f) Fuel Breaks shall be constructed using the most ecologically and site appropriate treatment option, such as, but not limited to, prescribed burning, manual treatment, mechanical treatment, prescribed herbivory, and targeted ground application of herbicides.

(g) Where a Local Jurisdiction requires Fuel Breaks, maintenance mechanisms shall be established to ensure the fire behavior objectives and thresholds are maintained over time.

(h) The mechanisms required shall be binding upon the property for which the Fuel Break is established, shall ensure adequate maintenance levels, and may include written legal agreements; permanent fees, taxes, or assessments; assessments through a homeowners' association; or other funding mechanisms.

§ 1276.04 Greenbelts, Greenways, Open Spaces and Parks

(a) Where a Greenbelt, Greenway, open space, park, landscaped or natural area, or portions thereof, is intended to serve as a Fuel Break, the space or relevant portion thereof shall conform with the requirements in § 1276.03 (Fuel Breaks).

§ 1276.05 Disposal of Flammable Vegetation and Fuels

The disposal, including burning or removal to a site approved by the Local Jurisdiction, in consultation with the Fire Authority, of flammable vegetation and fuels caused by site construction, Road, and Driveway construction shall be in accordance with all applicable laws and regulations.

***

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Appendix H

Well Location Map

WELL NOTES:

(1) Ground Water Exploration Report, prepared by Don Moore, October 31, 2002.
Ground Water Exploration Interim Report of Initial Exploration, prepared by Don Moore & Dawson Drilling Co., September 8, 2003.

(2) Well Completion Report for Well #12 is missing from Interim Report, September 8, 2003.

(3) Additional 72 Hour Pump Test on Well #5 on November 29, 2004. Rancho Victoria Pump Test Results & Recommendations, prepared by Don Moore & Diamond Drilling Co., January 4, 2005.

(4) Additional Test Wells per Geophysical Groundwater Investigation Report, prepared by Gasch & Assoc. Inc., October, 2005 and drilled by Dawson Drilling Co.

(5) Per Don Moore, The El Dorado County Environmental Health Division records indicate two additional test wells, #13 and #14, were drilled on this project. The well sites were determined by a "Water Witcher". The well locations and data are unknown, however, they were dry holes and not included in any investigation reports prepared by Don Moore or Gasch & Assoc. Inc. The Test Well Data numbering has been revised to match the County's numbering.

(6) Well Completion Reports prepared by Dawson Drilling Co.

(7) Additional 28 hour Well Pumping Reports prepared by Diamond Well Drilling Company.
Well #19 on September 28, 2006; Well #28 on September 26,2006; Well #30 on October 3, 2006; Well #37 on October 25, 2006.

(8) WELLS DRILLED BY FRED WATERS. INFO VIA FAX 03/29/13.

(9) WELL DATA FROM KEVIN WALKER 06/17/2013.

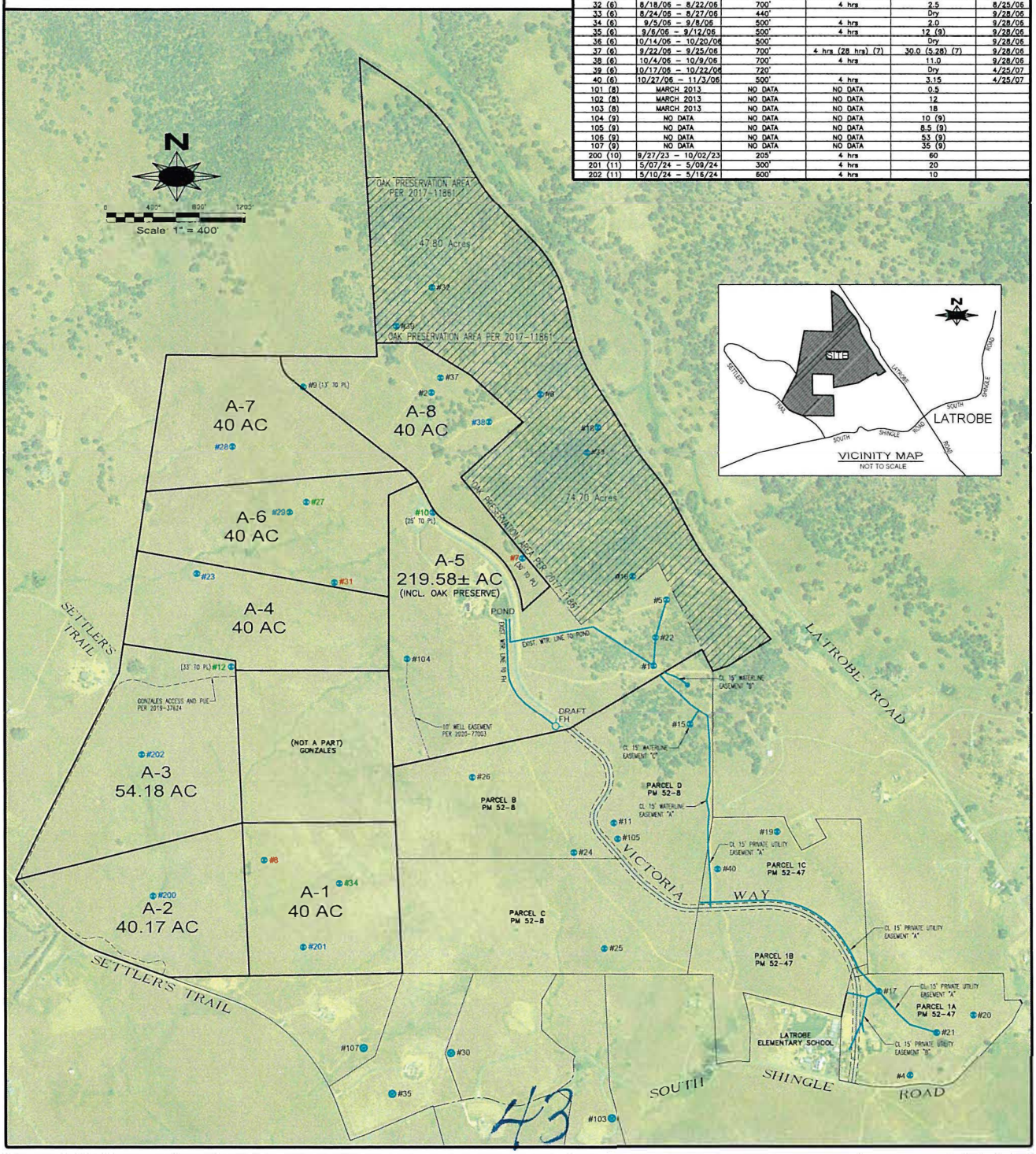
(10) WELL DATA FOR WELL #200 PROVIDED BY TRIANGLE WELL DRILLING VIA JEFF KOVACH ON 10.05.2023.

(11) WELL DATA FOR WELL #201 AND #202 PROVIDED BY TRIANGLE WELL DRILLING VIA JEFF KOVACH ON 5.22.2024.

- TOP PRODUCING WELL PER LOT
- WELL UNDER 5 GPM
- DRY WELL

TEST WELL DATA REPORT

EDC Well No.	Date Drilled	Depth	Test Length	GPM @ Test End	Data Surveyed by Mackay & Somps
1 (1)	2/14/03 – 2/18/03	450'	4 hrs	41 (9)	7/8/05
2 (1)	2/14/03 – 2/18/03	600'	6 hrs	5.39	7/8/05
3 (1)	3/23/03 – 3/26/03	900'		Dry	7/8/05
4 (1)	5/2/03 – 5/9/03	450'	4 hrs	18.8	7/8/05
5 (1)	5/30/03 – 6/2/03	300'	4 hrs (72 hrs) (3)	35 (9)	7/8/05
6 (1)	6/3/03 – 6/7/03	600'	6 hrs	16.66	7/8/05
7 (1)	6/12/03 – 6/18/03	620'		Dry	7/8/05
8 (1)	6/16/03 – 6/18/03	600'		Dry	7/8/05
9 (1)	6/18/03 – 6/24/03	700'	4 hrs	10.59	7/8/05
10 (1)	6/24/03 – 6/30/03	720'	4 hrs	2.37	7/8/05
11 (1)	7/1/03 – 07/07/03	630'	4 hrs	4.5	7/8/05
12 (1)	(2)	550'	14 hrs	2.34	7/8/05
13 (5)	Unknown	Unknown		Dry	
14 (5)	Unknown	Unknown		Dry	
15 (4)	11/07/05 –11/8/05	160'	4 hrs	50	1/3/06
16 (4)	11/8/05 – 11/10/05	600'	4 hrs	3	1/3/06
17 (4)	11/21/05 –11/22/05	400'	4 hrs	30	1/3/06
18 (4)	11/28/05 – 12/1/05	500'	4 hrs	1	1/3/06
19 (4)	1/15/06 – 2/1/06	600'	4 hrs (28 hrs) (7)	12 (6.0) (7)	3/15/06
20 (6)	2/9/06 – 2/10/06	200'	4 hrs	60	3/15/06
21 (6)	2/13/06 – 2/13/06	140'	4 hrs	70 (9)	3/15/06
22 (6)	2/17/06 – 2/22/06	400'	4 hrs	100 (9)	3/15/06
23 (6)	5/24/02 – 6/1/06	500'	4 hrs	11.25	6/21/06
24 (6)	6/4/06 – 6/9/06	840'	4 hrs	6	6/21/06
25 (6)	6/13/06 – 6/16/06	420'	4 hrs	20	6/21/06
26 (6)	6/15/06 – 6/17/06	800'		Dry	6/21/06
27 (6)	6/20/06 – 6/24/06	800'	4 hrs	2	8/25/06
28 (6)	7/6/06 – 7/12/06	600'	4 hrs (28 hrs) (7)	19.5 (6.0) (7)	8/25/06
29 (6)	8/8/06 – 8/12/06	600'	72 HRS (9)	12 (9)	8/25/06
30 (6)	8/3/06 – 8/8/06	600'	4 hrs (28 hrs) (7)	6 (9)	8/25/06
31 (6)	8/10/06 – 8/14/06	600'		Dry	8/25/06
32 (6)	8/18/06 – 8/22/06	700'	4 hrs	2.5	8/25/06
33 (6)	8/24/06 – 8/27/06	440'		Dry	9/28/06
34 (6)	9/5/06 – 9/8/06	500'	4 hrs	2.0	9/28/06
35 (6)	9/6/06 – 9/12/06	500'	4 hrs	12 (9)	9/28/06
36 (6)	10/14/06 – 10/20/06	500'		Dry	9/28/06
37 (6)	9/22/06 – 9/25/06	700'	4 hrs (28 hrs) (7)	30.0 (5.28) (7)	9/28/06
38 (6)	10/4/06 – 10/9/06	700'	4 hrs	11.0	9/28/06
39 (6)	10/17/06 – 10/22/06	720'		Dry	4/25/07
40 (6)	10/27/06 – 11/3/06	500'	4 hrs	3.15	4/25/07
101 (8)	MARCH 2013	NO DATA	NO DATA	0.5	
102 (8)	MARCH 2013	NO DATA	NO DATA	12	
103 (8)	MARCH 2013	NO DATA	NO DATA	18	
104 (9)	NO DATA	NO DATA	NO DATA	10 (9)	
105 (9)	NO DATA	NO DATA	NO DATA	8.5 (9)	
106 (9)	NO DATA	NO DATA	NO DATA	53 (9)	
107 (9)	NO DATA	NO DATA	NO DATA	35 (9)	
200 (10)	9/27/23 – 10/02/23	205'	4 hrs	60	
201 (11)	5/07/24 – 5/09/24	300'	4 hrs	20	
202 (11)	5/10/24 – 5/15/24	600'	4 hrs	10	



43

SHEET 1 OF 1 SHEETS

WELL EXHIBIT MAP

RANCHO VICTORIA PARCEL A PER PM 52-8

EL DORADO COUNTY, CALIFORNIA

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

*Figure not OCR compatible.

Appendix I

Well Completion Reports

State of California

Well Completion Report

Form DWR 188 Submitted 5/11/2024

WCR2024-004078

Owner's Well Number 5303056708 Date Work Began 05/07/2024 Date Work Ended 05/09/2024

Local Permit Agency Environmental Management Department - Placerville Office

Secondary Permit Agency Permit Number 8136 Permit Date 02/06/2024

Well Owner (must remain confidential pursuant to Water Code 13752)

Name STEFAN SOLOVIEV

Mailing Address 9 WEST 57TH ST.

City NEW YORK CITY State NY Zip 10019

Planned Use and Activity

Activity New Well

Planned Use Water Supply Domestic

Well Location

Address 4250 VICTORIA LN

City SHINGLE SPRINGS Zip 95682 County El Dorado

Latitude 38 Deg. 33 Min. 29.9599 Sec. N Longitude -121 Deg. 0 Min. 23.482 Sec. W

Dec. Lat. 38.5583222 Dec. Long. -121.0065228

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 087010043

Township 08 N

Range 09 E

Section 08

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Downhole Rotary Hammer Drilling Fluid Water

Total Depth of Boring 300 Feet

Total Depth of Completed Well 300 Feet

Water Level and Yield of Completed Well

Depth to first water 89 (Feet below surface)

Depth to Static Water Level 25 (Feet) Date Measured 05/09/2024

Estimated Yield* 20 (GPM) Test Type Air Lift

Test Length 4 (Hours) Total Drawdown 275 (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	2	DIRT
2	6	CLAY BROWN
6	14	FRACTURED ROCK, DECOMPOSED GRANITE
14	35	FRACTURED ROCK BROWN
35	60	FRACTURED ROCK, CLAY MIX
60	87	GREENSTONE MIX
87	130	BROWN SHALE
130	300	GREENSTONE MIX WITH QUARTZ

45

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	67	Blank	PVC	N/A	0.432	6			PVC
2	0	200	Blank	PVC	N/A	0.432	4			PVC
2	200	300	Screen	PVC	N/A	0.432	4	Saw Cut	0.25	PVC

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	25	Cement	Portland Cement/Neat Cement		
25	300	Other Fill	See description.		NONE

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	67	11
67	160	6.5
160	300	6.125

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: TRIANGLE WELL DRILLING
Person, Firm or Corporation

5210 DEER VALLEY RD | RESCUE | CA | 95672
Address | City | State | Zip

Signed: *electronic signature received* | 05/11/2024 | 355933
C-57 Licensed Water Well Contractor | Date Signed | C-57 License Number

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

					N							W
Latitude Deg/Min/Sec						Longitude Deg/Min/Sec						

TRS:

APN:

EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH DIVISION
2850 Fairlane Ct., Bldg. C, Placerville, CA 95667 - (530) 621-5300
3368 Lake Tahoe Blvd., #303, So. Lake Tahoe, CA 96150 - (530)573-3450

REPORT OF WELL PRODUCTION

(For Building Permit approvals, form must be original wet stamp)

OWNER OF PROPERTY: STEFAN SOLOVIEV

ADDRESS OF OWNER: 9 WEST 57TH ST., SUITE 4500

NEW YORK, NY 10019

LOCATION OF PROPERTY: 4250 VICTORIA LANE / 0 SETTLERS TRAIL

SHINGLE SPRINGS, CA 95682

ASSESSOR'S PARCEL NUMBER: 087-010-043 (PARCEL A-1) **WELL PERMIT NUMBER:** 8136

TO BE COMPLETED BY WELL DRILLER OR PUMP CONTRACTOR

Result of four (4) hour well production test: 20 **gpm.**

Date Performed: 9 MAY 2024

Was test performed with a pump installed? ☐ **Yes** ☒ **No**

Depth of well: 300 **ft.** **Static water level** 25 **ft.**

Diameter of well casing: 6 X 4 **in.**

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

ACTUAL WATER PRODUCTION MAY BE DEPENDENT ON HYDROLOGICAL CONDITIONS BEYOND THE CONTROL OF CONTRACTOR, AND WHICH ARE SUBJECT TO CYCLIC OR ANNUAL CHANGES IN SHORT PERIODS OF TIME. THE DRILLING CONTRACTOR DOES NOT WARRANT THE CONTINUED PRODUCTION OF ANY QUANTITY OR QUALITY OF WATER DISCOVERED OR REPORTED AT ANY STAGE OF OR AT THE CONCLUSION OF THE PROJECT.

Test performed by: S. DAWSON / 530.677.2750 ~~TRIANGLE WELL DRILLING~~

State License Number: 355933

*****WELL DRILLER MUST PROVIDE PLOT PLAN ON NEXT PAGE and COMPLETE BOTTOM PORTION IF WELL PRODUCTION IS LESS THAN 5 GPM.**

47

COMMUNITY DEVELOPMENT AGENCY
ENVIRONMENTAL MANAGEMENT DIVISION
http://www.edcgov.us/EMD/

PLACERVILLE OFFICE:
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5300
(530) 626-7130 Fax

LAKE TAHOE OFFICE:
924 B Emerald Bay Rd.
South Lake Tahoe, CA 96150
(530) 573-3450
(530) 542-3364 Fax

REGISTERED INSPECTOR'S
WATER WELL SEALING/DESTRUCTION RECORD

PERMIT # 8136	APN# 087-010-043	ACTIVITY DATE: 9 MAY 2024

TYPE AND QUANTITY OF MATERIAL USED:

1 BAG BENTONITE
1 BAG CEMENT

METHOD OF PLACEMENT:

WHEELBARROW MIX BENTONITE PACKER WITH CEMENT SEAL

25 FEET (From packer to top of seal)

REMARKS: PARCEL A-1 / 4250 VICTORIA (@ SETTLERS TRAIL)
SOLOVIEV

Employee installing seal: S. DAWSON

DESCRIBE ANY VARIANCE IN THE SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS:

GPS/GIS COORDINATE (WGS 84):

LONGITUDE	LATITUDE	ELEVATION

INSPECTION NOTES:

Registered Inspector Certification:

Signature: Scott Dawson Date: 10 MAY 2024

Print Name: SCOTT DAWSON License No. 355933 Type C-57

State of California

Well Completion Report

Form DWR 188 Submitted 5/22/2024

WCR2024-004327

Owner's Well Number 5303056708 Date Work Began 05/10/2024 Date Work Ended 05/16/2024

Local Permit Agency Environmental Management Department - Placerville Office

Secondary Permit Agency Permit Number 8137 Permit Date 02/06/2024

Well Owner (must remain confidential pursuant to Water Code 13752)

Name STEFAN SOLOVIEV

Mailing Address 9 WEST 57TH ST.

City NEW YORK CITY State NY Zip 10019

Planned Use and Activity

Activity New Well

Planned Use Water Supply Domestic

Well Location

Address 4250 VICTORIA LN

City SHINGLE SPRINGS Zip 95682 County El Dorado

Latitude 38 Deg. 33 Min. 49.1165 Sec. N Longitude -121 Deg. 0 Min. 37.4684 Sec. W

Dec. Lat. 38.5636435 Dec. Long. -121.0104079

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 087010043

Township 08 N

Range 09 E

Section 08

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Downhole Rotary Hammer Drilling Fluid Water

Total Depth of Boring 600 Feet

Total Depth of Completed Well 600 Feet

Water Level and Yield of Completed Well

Depth to first water 82 (Feet below surface)

Depth to Static Water Level 15 (Feet) Date Measured 05/16/2024

Estimated Yield* 10 (GPM) Test Type Air Lift

Test Length 4 (Hours) Total Drawdown 585 (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	2	DIRT
2	4	CLAY
4	16	FRACTURED ROCK / DECOMPOSED GRANITE MIX
16	35	DECOMPOSED GRANITE
35	50	FRACTURED ROCK
50	600	GREENSTONE / FRACTURED QUARTZ MIX

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	56	Blank	PVC	N/A	0.432	6			PVC
2	0	440	Blank	PVC	N/A	0.432	4			PVC
2	440	600	Screen	PVC	N/A	0.432	4	Saw Cut	0.25	PVC

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	22	Cement	Portland Cement/Neat Cement		
22	600	Other Fill	See description.		NONE

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	56	11
56	100	6.5
100	600	6.125

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: TRIANGLE WELL DRILLING (Person, Firm or Corporation)

5210 DEER VALLEY RD (Address) | RESCUE (City) | CA (State) | 95672 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 05/22/2024 (Date Signed) | 355933 (C-57 License Number)

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

			N					W

Latitude Deg/Min/Sec | Longitude Deg/Min/Sec

TRS:

APN:

50

EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT
ENVIRONMENTAL HEALTH DIVISION

2850 Fairlane Ct., Bldg. C, Placerville, CA 95667 - (530) 621-5300
3368 Lake Tahoe Blvd., #303, So. Lake Tahoe, CA 96150 - (530)573-3450

REPORT OF WELL PRODUCTION
(For Building Permit approvals, form must be original wet stamp)

OWNER OF PROPERTY: STEFAN SOLOVIEV

ADDRESS OF OWNER: 9 WEST 57TH ST. SUITE 4500
NEW YORK CITY, NY 10019

LOCATION OF PROPERTY: 4250 VICTORIA LN / 0 SETTLERS TRAIL
SHINGLE SPRINGS, CA 95682

ASSESSOR'S PARCEL NUMBER: 087-010-043 (PARCEL A-3) **WELL PERMIT NUMBER:** 8137

TO BE COMPLETED BY WELL DRILLER OR PUMP CONTRACTOR

Result of four (4) hour well production test: 10 **gpm.**

Date Performed: 05/16/2024

Was test performed with a pump installed? ☐ **Yes** ☒ **No**

Depth of well: 60 **ft.** **Static water level** 15 **ft.**

Diameter of well casing: 6 X 4 **in.**

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

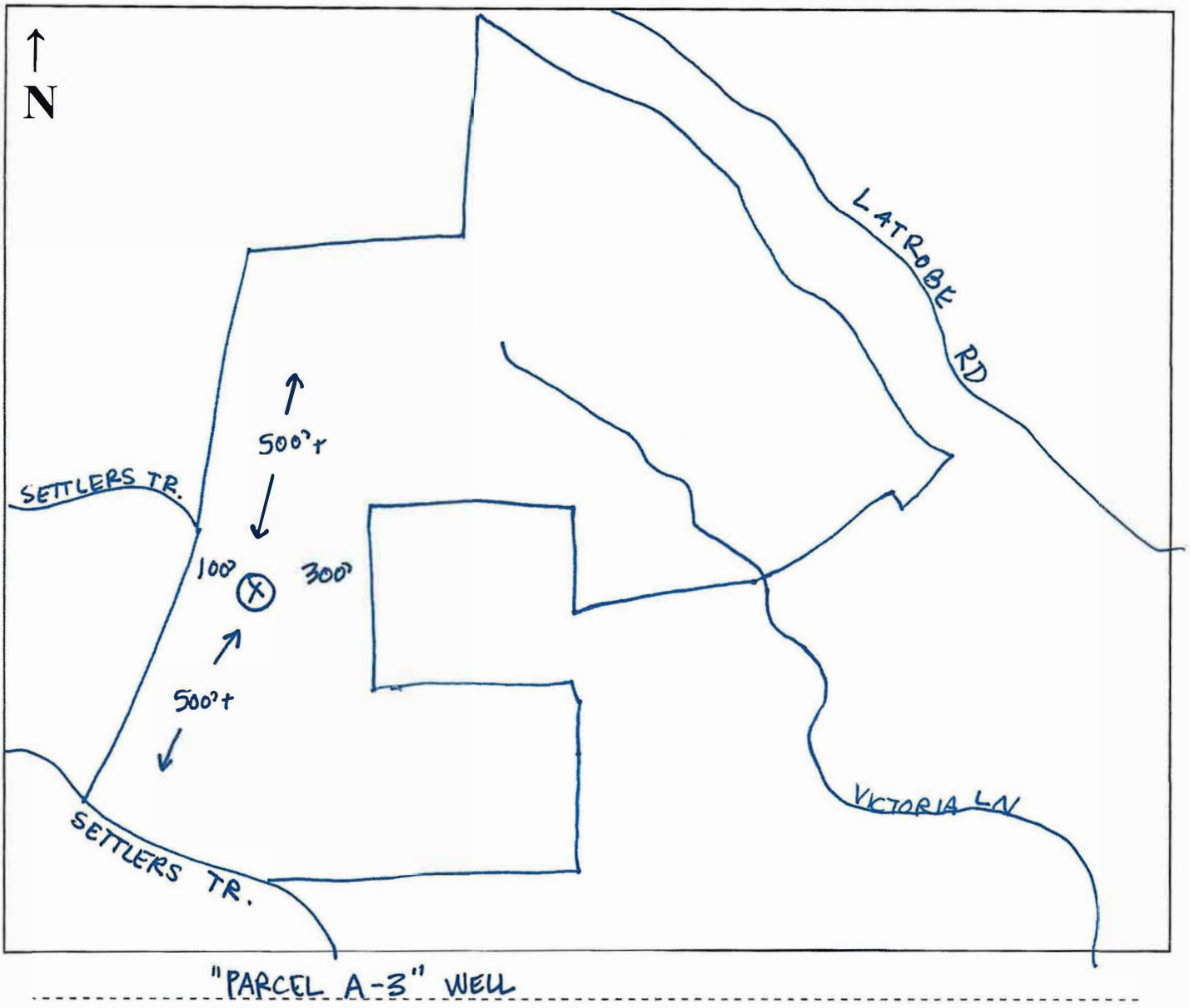
ACTUAL WATER PRODUCTION DEPENDS UPON HYDROLOGICAL CONDITIONS BEYOND THE CONTROL OF CONTRACTOR, AND WHICH ARE SUBJECT TO DRAMATIC CHANGES IN SHORT PERIODS OF TIME. THEREFORE CONTRACTOR DOES NOT WARRANT THE CONTINUAL PRODUCTION OF ANY QUANTITY OR QUALITY OF WATER OBSERVED OR REPORTED AT ANY STAGE OF OR AT THE CONCLUSION OF THE PROJECT.

Test performed by: S. DAWSON / 530.677.2750

State License Number: TRIANGLE WELL DRILLING 355933

*****WELL DRILLER MUST PROVIDE PLOT PLAN ON NEXT PAGE and COMPLETE BOTTOM PORTION IF WELL PRODUCTION IS LESS THAN 5 GPM.**

PLOT PLAN TO BE COMPLETED BY WELL DRILLER



IF WELL PRODUCTION RATE IS LESS THAN 5 GPM:

5 gpm x 240 min. = 1,200 gallons required

_____ x 240 min. = _____
Production. Rate gallons produced

Storage credit in well shaft: _____gallons (per well driller)

_____ gallons of additional storage required.

*Figure not OCR compatible.

COMMUNITY DEVELOPMENT AGENCY
ENVIRONMENTAL MANAGEMENT DIVISION
http://www.edcgov.us/EMD/

PLACERVILLE OFFICE:
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5300
(530) 626-7130 Fax

LAKE TAHOE OFFICE:
924 B Emerald Bay Rd.
South Lake Tahoe, CA 96150
(530) 573-3450
(530) 542-3364 Fax

REGISTERED INSPECTOR'S
WATER WELL SEALING/DESTRUCTION RECORD

PERMIT # 8137	APN# 087-010-043	ACTIVITY DATE: 05/16/2024

TYPE AND QUANTITY OF MATERIAL USED:

1 BAG BENTONITE
1 BAG CEMENT

METHOD OF PLACEMENT:

WHEELBARROW MIX BENTONITE PACKER WITH CEMENT SEAL

22 FEET (From packer to top of seal)

REMARKS: PARCEL A-3

Employee installing seal: S. DAWSON

DESCRIBE ANY VARIANCE IN THE SEALING METHOD OR MATERIAL FROM PERMIT CONDITIONS:

GPS/GIS COORDINATE (WGS 84):

LONGITUDE	LATITUDE	ELEVATION

INSPECTION NOTES:

Registered Inspector Certification:

Signature: Scott Dawson Date: 05/17/2024

Print Name: SCOTT DAWSON License No. 355933 Type C-57

Appendix J

Fuel Break, Pond & Pool Map

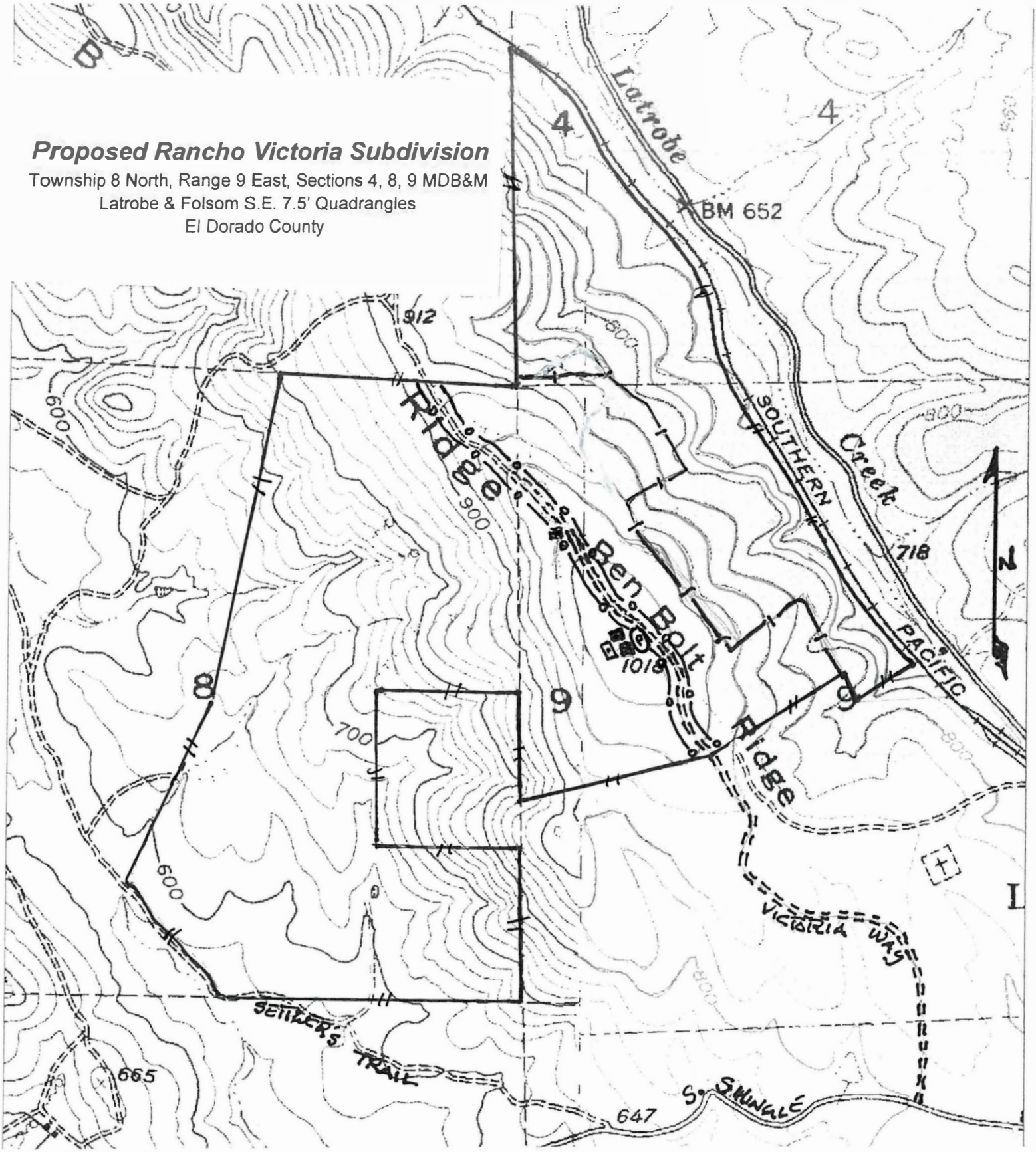


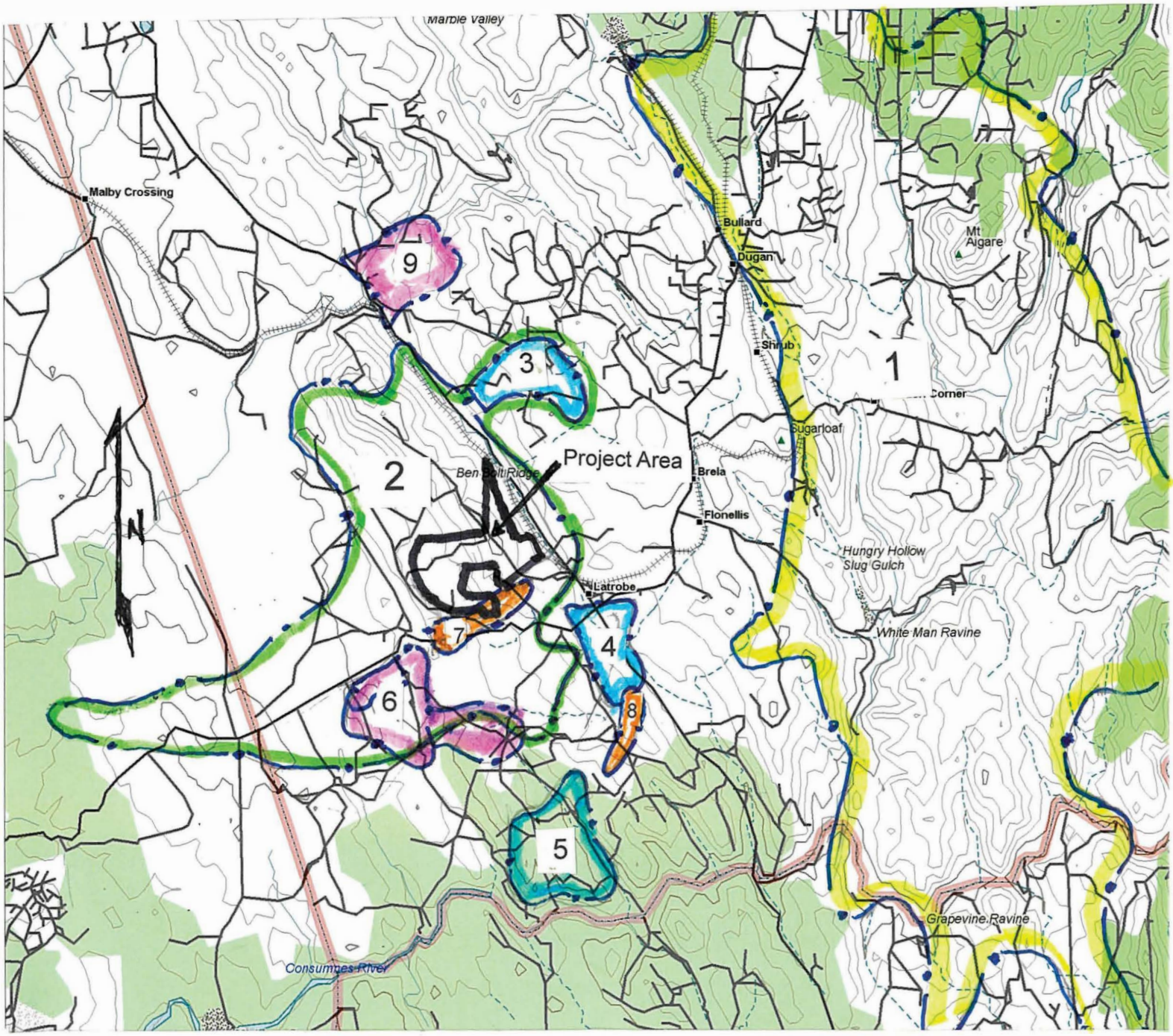
*Figure not OCR compatible.

Appendix K

Fire History Map & Fire List

Proposed Rancho Victoria Subdivision

Township 8 North, Range 9 East, Sections 4, 8, 9 MDB&M
Latrobe & Folsom S.E. 7.5' Quadrangles
El Dorado County



Rancho Victoria Property Boundary (approx)

Fire Boundary (approx)

5 Fire Number (page)

Scale

0 3162 ft.

57

*Figure not OCR compatible.

Fire History

Map #	Fire Name	Year of Fire
1	Quarry	1976
2	Scott	1996
3	Cothrin	1956
4	White Rock	1964
5	Indian Creek	1964
6	Latrobe	2017
7	Shingle	2018
8	Chapparal	2019
9	Dunlap	1959

Source: Cap Radio.org California Wildfire History Map 2024

Appendix L

Ready for Wildfire Diagram

WILDFIRE IS COMING.
ARE YOU READY?

Defensible Space is your property's front line defense against wildfire. Creating and maintaining defensible space around your home can dramatically increase your home's chance of surviving a wildfire and improves the safety of firefighters defending your property. 100 feet of defensible space is required by law.*

CAL FIRE SINCE 1885

ONE LESS SPARK
ONE LESS WILDFIRE

*For more information on creating defensible space and legal requirements visit
READYFORWILDFIRE.ORG

TWO ZONES MAKE UP THE REQUIRED 100 FEET OF DEFENSIBLE SPACE:

ZONE 1: 30 feet of Lean, Clean & Green

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Keep tree branches 10 feet away from your chimney and other trees.

ZONE 2: 30–100 feet of Reduced Fuel

4. Cut or mow annual grass down to a maximum height of 4 inches.
5. Create horizontal spacing between shrubs and trees.
6. Create vertical spacing between grass, shrubs and trees.

Use Equipment Properly to Keep from Sparking a Wildfire

7. Mow before 10 a.m., and never on a hot or windy day. String trimmers are a safer option (vs. lawnmowers) for clearing vegetation.

VERTICAL SPACING

Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical "fire ladder."

HORIZONTAL SPACING

Create horizontal and vertical spacing between plants, the amount of spacing will depend on how steep the slope is and the size of the plants.

*Figure not OCR compatible.

Appendix M

Memorandum of Understanding

El Dorado County and El Dorado Hills Fire Department

Cel

Memorandum of Understanding

Between the

County of El Dorado and the El Dorado Hills County Water District

Regarding the

Delegation of Enforcement of Certain Fire and Panic Safety Provisions

Found in the 2019 California Building Standards Code

I. Purpose

California Health and Safety Code Section 13146 requires the responsibility for enforcement of building standards adopted by the State Fire Marshal related to fire and panic safety in R-3 dwellings, as described in Section 310.4 of Part 2 of the California Code of Regulations Title 24, to be delegated to either the chief of the fire authority or the chief building official of the county. The purpose of this Memorandum of Understanding (MOU) is to define those responsibilities, as described in El Dorado County Resolution No. 038-2020 of the Board of Supervisors of the County of El Dorado, where they pertain to R-3 dwellings located in the jurisdiction of both the County of El Dorado and the El Dorado Hills County Water District, recognized as the El Dorado Hills Fire Department, and also known collectively as "parties" to this agreement.

II. Scope

This MOU applies to the delegation of enforcement related to those fire and panic safety provisions for R-3 dwellings as found in California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2 and Title 24, Parts 1 through 12.

III. Roles and Responsibilities

NOW, THEREFORE, it is hereby agreed by and between the parties as follows:

a. The COUNTY OF EL DORADO *Chief Building Official*, or their designee, shall be responsible for the enforcement of the following fire and panic safety provisions related to R-3 dwellings located in the jurisdiction of the El Dorado Hills County Water District.

Fire & Panic Provision	T14 Fire Safe[i]	T24 CA Building Standards Code[ii]			
		Part 2[iii]	Part 2.5[iv]	Part 5[v]	Part 9[vi]
Occupancy Classification and Use	NA	302	NA	NA	202
Means of Egress	NA	Ch. 10	R311	NA	Ch. 10
Emergency Escape /Rescue Windows	NA	1030	R310	NA	1030
Dwelling /Garage Fire Separation	NA	406.3	R302.6	NA	NA
Fire Protection of Floors-Walls-Roof	NA	704 /706	R302.11	NA	NA
Draft Stopping / Fireblocking	NA	708.4.2	R302	NA	NA
Exterior Wildfire Exposure Const.	NA	701A	R327	NA	4905
Roof Coverings	NA	1507	R905	NA	4905
Solar Photovoltaic Power Systems	NA	3111	R324	NA	1204

b. The El Dorado Hills Fire Department *Fire Chief*, or their designee, shall be responsible for the enforcement of the following fire and panic safety provisions related to R-3 dwellings located in the jurisdiction of the El Dorado Hills County Water District.

Fire & Panic Provision	T14 Fire Safe	T24 CA Building Standards Code			
		Part 2	Part 2.5	Part 5	Part 9
Address Identification	1274	502.1	R319.1	NA	505.1
Fire Apparatus Access Roads	1273	NA	NA	NA	503
Fire Access to Buildings and Roofs	NA	NA	NA	NA	316.4
Fire Protection Water Supplies	1275	NA	NA	NA	507
Automatic Fire Sprinkler Systems	NA	903.2.8	R313	612	903.2.8
Smoke Alarms/Carbon Monoxide Alarms	NA	907/915	R314	NA	915/1103
Vegetation Management Compliance	1276	701A.5	R337.1.5	NA	4906

c. Both parties agree to enforce all applicable local fire and panic safety codes and ordinances related to R-3 dwellings during the course of their enforcement activities.

d. Both parties agree that when a new or substantially revised fire and panic safety provision related to R-3 dwellings is identified in writing by either party, or the State Fire Marshal, during the term of this MOU that the parties shall as soon as practical meet and develop interim guidance for the enforcement of that provision until such time that an MOU amendment can be agreed on.

e. Both parties agree that all appeals of orders, decisions, or determinations of provisions found in this MOU shall be made utilizing the applicable Board of Appeal provisions described in California Code of Regulations Title 24, Part 2 or Part 9.

IV. Reporting Requirements

Parties agree to utilize the County of El Dorado's current permit tracking program to record the status of all related plan review/inspections performed as part of a R-3 dwelling construction project.

V. Amendments

This MOU shall be in force upon the signature of authorized representatives from both parties, may be amended by mutual consent of the parties, and shall remain in effect until terminated under Section VII. At the conclusion of the triennial code adoption process for the regulations identified in Section II, the parties anticipate that amendments may be appropriate and, upon such a request by either party, the parties agree to meet and consider any proposed amendments in good faith.

VI. Limits

This MOU pertains to items associated with the enforcement of fire and panic safety provisions for R-3 dwellings as described in the California Building Standards Code only. This MOU does not pertain to all other occupancy types or subjects found in this code.

VII. Termination of MOU

Each party shall have the right to terminate the MOU by giving 60 days written notice in writing to the other party at any time. If the MOU is terminated by either party, steps shall be taken to ensure that the termination does not affect any prior obligation, project, or activity already in progress. Any such notice or any other written notice provided under this MOU shall be in writing and served by depositing the same in the United States Post Office, postage prepaid, and addressed as follows:

FOR COUNTY:

Don Ashton
Chief Administrative Officer or successor
330 Fair Lane
Placerville, CA 95667

with a copy to:

Chief Building Official
County of El Dorado
Planning and Building Department
2850 Fairlane Court
Placerville, CA 95667

FOR FIRE DISTRICT:

Maurice Johnson
Fire Chief or successor
1050 Wilson Boulevard
El Dorado Hills CA 95762

VIII. Costs and Liability

Both parties agree that this MOU does not provide for remuneration for the enforcement responsibilities allocated herein. Consistent with Health and Safety Code section 13146(b), each party may establish its own applicant fees to recover the reasonable costs of providing a service under this MOU, but neither party will seek to recover such costs from the other. Each party shall remain responsible for its own acts or omissions in carrying out the enforcement responsibilities allocated herein.

IX. Approvals

The terms and conditions of this MOU are executed by the representatives whose signatures appear below on behalf of their respective agencies. The parties to this MOU represent that the undersigned individuals executing this MOU on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind said parties to obligations set forth herein.

County of El Dorado

5/11/21

Don Ashton Date
Chief Administrative Officer

El Dorado Hills County Water District

4/26/21

Maurice Johnson, Fire Chief Date

End Notes

[i] T14 refers to California Code of Regulations Title 14 Natural Resources Division 1.5 Department of Forestry Chapter 7 - Fire Protection Subchapter 2 SRA Fire Safe Regulations), 2020 edition.

[ii] Columns below describe the relevant code section where this topic is found. Additional sections of the code may also describe the topic but are not listed here for use in interpreting this MOU.

[iii] Part 2 refers to the California Building Code, 2019 edition.

[iv] Part 2.5 refers to the California Residential Code, 2019 edition.

[v] Part 5 refers to the California Plumbing Code, 2019 edition.

[vi] Part 9 refers to the California Fire Code, 2019 edition.

Appendix N

Residential Setback for Structure Defensible Space

EDHFD Standard 7

EL DORADO HILLS FIRE DEPARTMENT FIRE PROTECTION STANDARD

Residential Setback for Structure Defensible Space
STANDARD #7 EFFECTIVE 5-1-2024 REVISED 4-1-2024

SCOPE

To assist developers, builders, homeowners, and Community Risk Reduction Division (CRRD) staff members with the requirements and fire safety mitigation measures available when proposing the placement of new buildings in State Responsibility Areas (SRA) as described in California Code of Regulations Title 14, Section 1276.01

This standard establishes the same practical effect of wildfire protection standards in conjunction with building, construction, and development in the State Responsibility Area (SRA).

This standard shall apply to the construction of a new one- and two-family dwelling, residential accessory structure and/or siting of a newly installed manufactured home, mobile home, or factory-built housing.

DEFINITIONS

Non-Combustible Zone - A noncombustible buffer around structures and decks. Combustibles including, but not limited to, vegetation, trees including overhanging branches, grass/turf, wood/rubber mulch, wood/vinyl fencing, other stored items, etc. are not permitted in this zone.

Restrictive Covenant – A document signed by the property owner or legal agent including all construction restrictions applicable to a parcel. This Restrictive Covenant shall be signed in the presence of a licensed notary and recorded with the El Dorado County Recorder-Clerk's Office.

GENERAL

1. All parcels shall provide a minimum 30-foot setback for all buildings from all property lines and/or the center of a road.

2. When a 30-foot setback is not possible for practical reasons, which may include but are not limited to parcel dimensions or size, topographic limitations, or other

easements, the structure shall be constructed and maintained in accordance with Insurance Institute for Business and Home Safety (IBHS) Wildfire Prepared Home Plus including, but not limited to, the following restriction conditions:

a. Accessory structures located within the reduced fire setback zone shall comply with this restrictive covenant and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 710A.

b. Five (5) foot non-combustible zone provided horizontally around the structure.

c. Exterior windows, skylights, glazed doors, and glazed openings within exterior doors shall be multi-paned with at least two (2) tempered panes, minimum twenty (20) minute fire rated, or fire-resistant glass block units. Shutters installed over windows shall be non-combustible.

d. Areas under first floor bay windows shall be enclosed with non-combustible walls.

e. Exterior doors shall be non-combustible or have a non-combustible exterior storm door and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 708A.

f. Exterior walls shall be constructed with non-combustible building materials such as stucco, fiber-cement, stone, or brick and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 707A.

g. Eaves shall be enclosed on the underside with non-combustible material, ignition-resistant material, or minimum two (2) inch lumber.

h. Gutters and downspouts shall be of non-combustible material. Gutters shall be provided with a non-combustible guard.

i. Wildfire flame and ember resistant vents or WUI vents tested to ASTM E2886 shall be installed at all ventilation openings. Vents shall be compliant with and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 706A. Dryer vents shall be metal and equipped with a louver or flap.

j. Decks including posts, joists, railing, stairs, and walking surfaces shall be non-combustible and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 709A.

k. Projections shall be non-combustible, ignition-resistant, or one (1) hour fire-rated in accordance with IWUIC, Section 503.2 and/or NFPA 1144, Section 5.2.

l. Non-combustible fences shall be provided within five (5) feet of a structure. Fences attached to the structure shall be non-combustible within the first five (5) feet of the structure. Back-to-back, combustible fencing shall be separated by a minimum of five (5) feet.

PLAN SUBMITTAL

1. Projects seeking to construct a building within the required 30-foot fire-safe setback shall submit the following:

    a. Setback Exemption Request Letter (see Example A)

    Applies to structures encroaching the SRA required setback only. This request letter states the conditions (i.e., site topography) driving the request for exemption.

    b. Setback Compliance Plan (see Example B)

    Applies to structures encroaching the SRA required fire safe setback only. This plan shall illustrate the location of all structures located on the parcel, location of property lines, and location of required setbacks. This plan shall also illustrate the fire protection features to be installed (i.e., decks, soffits, windows, doors, skylights, vents, etc.), inclusive of the manufacturer's specifications, and the specific setback conditions required based upon structure location.

    c. Restrictive Covenant notarized and recorded with the El Dorado County Recorder-Clerk's Office. (see Example C)

    All requirements identified in Item 2 of the General section above shall be included within the Restrictive Covenant document. Once recorded you are then required to submit a copy of the recorded Restrictive Covenant (including the document number that the County provides on the document) to EDHFD for our records.

2. Permit approval to construct a building located in the fire-safe setback will <u>not</u> be granted without a Restrictive Covenant being recorded with the County of El Dorado and this information being provided to EDHFD.

AUTHORITY CITED

1. California Fire Code (CFC)
2. California Building Code (CBC).
3. California Code of Regulations, Title 14, Fire Safe Regulations SRA

Approved By:

Chrishana Fields, Fire Marshal

EXAMPLE A

Setback Exception Request Letter

Bob Smith
1234 Example Drive
El Dorado Hills, CA 95762
(xxx) xxx-xxxx
bobsmith@email.com

January 1, 2023

El Dorado Hills Fire Department
1050 Wilson Blvd
El Dorado Hills, CA 95762
(916) 933-6623

Re: Setback Exception Request Letter - PERMIT NUMBER: 0123456 – ADDRESS: 1234 Example Drive, El Dorado Hills, CA 95762

Dear El Dorado Hills Fire Department:

I, Bob Smith, am requesting exception from Title 14 §1276.01 for reduced fire safe setback(s). The reason I am asking for this exception is due to the parcel size, topography, and buildable area of my parcel at 1234 Example Drive, El Dorado Hills. I will meet the setback requirements listed in the recorded Restrictive Covenant and shall do so for the life of the property. Please accept this setback exception request letter for my project.

Sincerely,

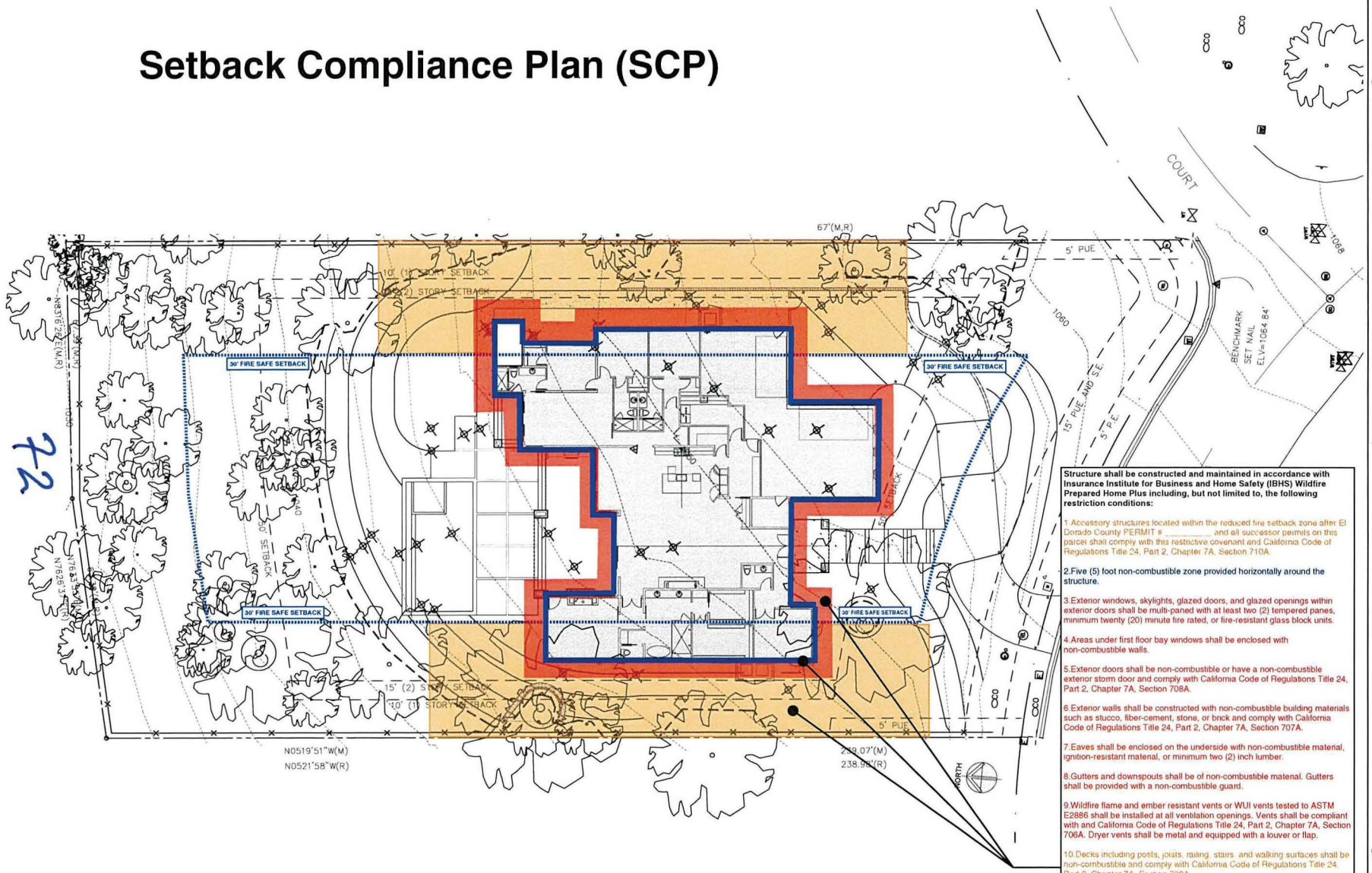
_____	_____	_____
Signature	Print Name	Date

_____	_____	_____
Signature	Print Name	Date

EXAMPLE B

Setback Compliance Plan (SCP)

1234 SAMPLE STREET
EL DORADO HILLS, CA 95672



Structure shall be constructed and maintained in accordance with Insurance Institute for Business and Home Safety (IBHS) Wildfire Prepared Home Plus including, but not limited to, the following restriction conditions:

1.Accessory structures located within the reduced fire setback zone after El Dorado County PERMIT # _____ and all successor permits on this parcel shall comply with this restrictive covenant and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 710A.

2.Five (5) foot non-combustible zone provided horizontally around the structure.

3.Exterior windows, skylights, glazed doors, and glazed openings within exterior doors shall be multi-paned with at least two (2) tempered panes, minimum twenty (20) minute fire rated, or fire-resistant glass block units.

4.Areas under first floor bay windows shall be enclosed with non-combustible walls.

5.Exterior doors shall be non-combustible or have a non-combustible exterior storm door and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 708A.

6.Exterior walls shall be constructed with non-combustible building materials such as stucco, fiber-cement, stone, or brick and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 707A.

7.Eaves shall be enclosed on the underside with non-combustible material, ignition-resistant material, or minimum two (2) inch lumber.

8.Gutters and downspouts shall be of non-combustible material. Gutters shall be provided with a non-combustible guard.

9.Wildfire flame and ember resistant vents or WUI vents tested to ASTM E2886 shall be installed at all ventilation openings. Vents shall be compliant with and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 706A. Dryer vents shall be metal and equipped with a louver or flap.

10.Decks including posts, joists, railing, stairs, and walking surfaces shall be non-combustible and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 709A.

11.Projections shall be non-combustible, ignition-resistant, or one (1) hour fire-rated in accordance with IWUIC, Section 503.2 and/or NFPA 1144, Section 5.2.

12.Non-combustible fences shall be provided within five (5) feet of a structure. Fences attached to the structure shall be non-combustible within the first five (5) feet of the structure. Back-to-back, combustible fencing shall be separated by a minimum of five (5) feet.

GENERAL NOTES:

1. CONTRACTOR TO PROVIDE SUITABLE PAD FOR NEW CONSTRUCTION
2. CONTRACTOR TO PROVIDE SUITABLE DRAINAGE AWAY FROM BUILDING- FINISH GRADE TO SLOPE 2% MIN OVER A DISTANCE OF 10' MIN AWAY FROM HOUSE
3. CONTRACTOR TO OBTAIN THE SERVICES OF A GEOTECHNICAL ENGINEER TO TEST THE COMPACTING OF THE BUILDING PAD AND PROVIDE REPORT
4. CONTRACTOR TO OBTAIN SERVICES OF PROFESSIONAL LAND SURVEYOR TO LOCATE BUILDING FOOTPRINT ON PROPERTY
5. CONTRACTOR TO FOLLOW ALL PERTINENT COUNTY AND BUILDING CODE REQUIREMENTS
6. ALL DOWNSPOUT DRAINAGE SHALL BE CAPTURED IN A PERIMETER TIGHT LINE SYSTEM AND PIPED TO AN APPROVED DISCHARGE POINT
7. THE CONTRACTOR SHALL FOLLOW ALL C.C.R. GUIDELINES FOR SITE CONSTRUCTION AND TREE PRESERVATION
8. VERIFY UTILITY LOCATIONS IN FIELD

SITE COVERAGE

SITE AREA:	34,823 S.F.
PROJECT COVERAGE:	4,450 (RESIDENCE) 1270 (GARAGE) 192 (COVERED PORCH) 6,032 TOTAL 11.01% COVERAGE

LEGEND

A.D. — AREA DRAIN- CONNECT ALL WITH DRAIN LINE AND DRAIN TO APPROVED DISCHARGE POINT

DRAINAGE SWALE- SLOPE 2% MIN TO DISCHARGE POINT

SLOPE FLATWORK TO DRAIN 2%

TEMP. CONSTRUCTION FENCING FOR TREE PROTECTION

REVISIONS:

1
2
3

SCALE: 1" = 10'-0"
DATE: JULY 20, 2022
JOB: 22003
SHEET:

A1.2

72

EXAMPLE C

Recording requesting by:

EL DORADO HILLS
FIRE DEPARTMENT

When recorded mail a copy to:
El Dorado Hills Fire Department
1050 Wilson Blvd.
El Dorado Hills, CA 95762

Recorder's Use Only

RESTRICTIVE COVENANT

FIRE-SAFE SETBACK CONDITIONS

NOTICE IS HEREBY given that a restrictive covenant requiring fire-safe conditions is imposed upon that certain parcel designated as **APN#** _____ **& LOT#** _____ of the _____ **Subdivision**, as filed in the official records in the Office of the County Recorder of the County of El Dorado, State of California, and **as legally described in Exhibit A attached hereto.**

This restriction is imposed as a set of conditions to grant a variance to the required 30-foot fire-safe setback requirements of Title 14 CCR SRA/VHFHSZ Fire Safe Regulations. Where any portion of the structure falls within the 0–29-foot fire safe set back zone, the structure shall be constructed and maintained in accordance with Insurance Institute for Business and Home Safety (IBHS) Wildfire Prepared Home Plus including, but not limited to, the following restriction conditions:

1. **Accessory structures located within the reduced fire setback zone after El Dorado County PERMIT #** _____ **and all successor permits on this parcel shall comply with this restrictive covenant and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 710A.**

2. **Five (5) foot non-combustible zone provided horizontally around the structure.**

3. **Exterior windows, skylights, glazed doors, and glazed openings within exterior doors shall be multi-paned with at least two (2) tempered panes, minimum twenty (20) minute fire rated, or fire-resistant glass block units. Shutters installed over windows shall be non-combustible.**

4. **Areas under first floor bay windows shall be enclosed with non-combustible walls.**

5. **Exterior doors shall be non-combustible or have a non-combustible exterior storm door and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 708A.**

6. **Exterior walls shall be constructed with non-combustible building materials such as stucco, fiber-cement, stone, or brick and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 707A.**

7. **Eaves shall be enclosed on the underside with non-combustible material, ignition-resistant material, or minimum two (2) inch lumber.**

8. **Gutters and downspouts shall be of non-combustible material. Gutters shall be provided with a non-combustible guard.**

73

9. **Wildfire flame and ember resistant vents or WUI vents tested to ASTM E2886 shall be installed at all ventilation openings. Vents shall be compliant with and California Code of Regulations Title 24, Part 2, Chapter 7A, Section 706A. Dryer vents shall be metal and equipped with a louver or flap.**

10. **Decks including posts, joists, railing, stairs, and walking surfaces shall be non-combustible and comply with California Code of Regulations Title 24, Part 2, Chapter 7A, Section 709A.**

11. **Projections shall be non-combustible, ignition-resistant, or one (1) hour fire-rated in accordance with IWUIC, Section 503.2 and/or NFPA 1144, Section 5.2.**

12. **Non-combustible fences shall be provided within five (5) feet of a structure. Fences attached to the structure shall be non-combustible within the first five (5) feet of the structure. Back-to-back, combustible fencing shall be separated by a minimum of five (5) feet.**

Said restriction shall be binding upon the heirs, assigns, and successor in the interest of the grantors, and shall remain in effect until rescinded by the El Dorado Hills County Water District, A.k.a. the El Dorado Hills Fire Department. The purpose of this Restrictive Covenant is to give constructive notice of this development limitation.

For Individual or multiple property owners:

_____	_____	_____
(Property Owner - Signature)	(Property Owner - Print Name)	(Date)
_____	_____	_____
(Property Owner - Signature)	(Property Owner - Print Name)	(Date)

For property held by trust, Corporation, or LLC:

_____
(Name of Trust, Corporation, LLC)

_____	_____	_____
(Signatory Signature)	(Signatory Name and Title)	(Date)

* Signatory for Corporations shall be: President, Vice President, Secretary, Treasurer, CFO, CEO
* Signatory for Limited Liability Corporations (LLC) shall be: Officer, Member, Managing Member

74

EXHIBIT A

ENTER THE LEGAL DESCRIPTION FOR THE LOT IN THIS SECTION AS DESCRIBED IN THE RECORDED GRANT DEED.

ACKNOWLEDGMENT

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 _____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____,
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.

Signature _____ **(Seal)**

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EL DORADO HILLS COUNTY WATER DISTRICT

EL DORADO HILLS FIRE DEPARTMENT

ORDINANCE NO. 2023-01

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE EL DORADO HILLS COUNTY WATER DISTRICT AS FOLLOWS:

AN ORDINANCE OF THE EL DORADO HILLS COUNTY WATER DISTRICT RELATED TO HAZARDOUS VEGETATION MANAGEMENT ON UNIMPROVED PARCELS, AND DECLARING CERTAIN HAZAROUS VEGETATION AND COMBUSTIBLE MATERIALS A PUBLIC NUISANCE, AND PROVIDING FOR THE REMOVAL THEREOF.

Be it ORDAINED by the Board of Directors of the El Dorado Hills County Water District (EDHCWD), also known as the El Dorado Hills Fire Department:

Section 1: **FINDINGS OF FACTS**

Section 2: **APPLICATION OF ORDINANCE**

Section 3: **DEFINITONS**

Section 4: **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Section 5: **CLEARANCE OF HAZARDOUS VEGETATION ON UNIMPROVED PARCELS**

Section 6: **ACCEPTABLE METHODS OF CLEARANCE**

Section 7: **DUTY TO ABATE HAZARDOUS VEGETATION AND COMBUSTIBLE MATERIAL**

Section 8: **CORRECTIVE ACTIONS**

Section 9: **INSPECTIONS BY THE EL DORADO HILLS FIRE DEPARTMENT**

Section 10: **REOCCURRING FIRE HAZARD**

Section 11: **PENALTIES**

Section 12: **ABATEMENT OF NUISANCE BY FIRE CODE OFFICIAL**

Section 13: **ABATEMENT PROCEDURES**

Section 14: **REAL ESTATE TRANSACTIONS**

Section 15: **CONFLICT**

Section 16: **SEVERABILITY**

Section 17: **EFFECTIVE DATE AND PUBLICATION**

77

SECTION 1: **FINDINGS OF FACTS**

1.1 The El Dorado Hills County Water District (EDHCWD), also known as the El Dorado Hills Fire Department, is an independent water district established under Division 12, Part 2, Article 7, Section 31120[1] of the State Water Code; and

1.2 It is the intent of the Governing Board of EDHCWD that this Ordinance shall apply to an annual program for the Abatement of the growth and/or accumulation of weeds, grasses, shrubs, dormant brush, slash, tree limbs, hazardous vegetation and combustible materials on all designated Unimproved Parcels within the EDHCWD and maintenance of those parcels to prevent vegetation from growing back; and

1.3 All parcels within the EDHCWD have been identified and designated as being within either a State Responsibility Area (SRA) or Local Responsibility Area (LRA) Moderate, High or Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE) in accordance with the Fire and Resource Assessment Program (FRAP) Map; and

1.4 During the fire season, the EDHCWD generally has a dry, arid climate conducive to wildfires. EDHCWD has a very diverse and complex landscape, which includes dry, brush-covered, and grass-covered wildlands, mountainous areas, and other terrains which are home to many sensitive plant and animal species. Many of the EDHCWD's native and non-native plant species can be highly combustible during normal dry periods and have contributed to significant wildfires within the EDHCWD. Difficult topography, terrain, and weather conditions exacerbate the fire danger and the difficulty of fighting wildfires, and have resulted in catastrophic fire losses to life, property, and the environment; and

1.5 Catastrophic wildfire events pose a serious threat to the preservation of public peace, health and safety within any wildland urban interface and intermix communities. The proper implementation and enforcement of hazardous fuel regulations and landscaping requirements have been proven to reduce the impact from destructive wildfires through the mitigation of hazardous fuel conditions around homes and roadways; and

1.6 Wildfires with extreme fire behavior are occurring more often and growing larger in size. Eighteen (18) of the twenty (20) most destructive wildland fires in the State of California have occurred between 2002-2022. The County of El Dorado has a history of destructive wildfires which have burned within its boundaries. These include the 2007 Angora Fire, 2014 King Fire,

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[1] A district may exercise any of the powers, functions, and duties which are vested in, or imposed upon, a fire protection district pursuant to the Fire Protection District Law of 1987, Part 3 (commencing with Section 13800) of Division 12 of the Health and Safety Code.

2021 Caldor Fire and the 2022 Mosquito Fire. Climate change stressors, such as increased average air temperature, precipitation variability, reduced snowpack, drought and tree mortality, will lead to an increased frequency of large wildfires that will create adverse impacts on local communities in the County of El Dorado, including both El Dorado Hills and Latrobe; and

1.7 Of paramount importance to the Governing Board of EDHCWD and the citizens of El Dorado Hills and Latrobe are the protection of lives and structures from the threat of wildfire, and the safety of public safety personnel during wildfires. The proper maintenance of defensible space on Unimproved Parcels benefits property owners, public safety personnel, and all citizens of both El Dorado Hills and Latrobe by dramatically increasing the likelihood that structures will survive a wildfire, provides for firefighter safety during a wildfire, and generally aids in the protection of lives, property, and the environment; and

1.8 The Governing Board of EDHCWD finds and declares that the uncontrolled growth and/or accumulation of weeds, grasses, hazardous vegetation and combustible materials or obstructions on sidewalks, streets, and on lands or lots within the EDHCWD is dangerous or injurious to neighboring property and the health, safety, and welfare of residents of the EDHCWD. Such growth and accumulation constitute a public nuisance in that it creates fire hazards, reduces the value of private property, promotes blight and deterioration, invites plundering, constitutes an unattractive nuisance, and creates a hazard to the health, safety, and general welfare of the public; and

1.9 The purpose of this Ordinance is to provide for the removal of hazardous vegetation and combustible material from around the exterior of improvements situated in the jurisdiction of the EDHCWD to reduce the potential for fire and to promote the public health, safety, and welfare of the community. It is the further purpose of this Ordinance to establish a hazardous vegetation reduction program that provides a process to identify and abate hazardous vegetation on parcels and protect the lives and property of the citizens of the EDHCWD, while at the same time protecting sensitive plant and animal species and protecting against significant erosion and sedimentation. The removal of hazardous vegetation in the areas subject to this Ordinance is recognized as an essential action homeowners and property owners can take to increase the chances that homes, structures and other property will survive a wildfire, while protecting the natural environment. Regular fuels management and modifications consistent with the requirements of this Ordinance is necessary to ensure adequate defensible space is achieved; and

1.10 The defensible space required by this Ordinance is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structures, and there is no other feasible

mitigation measure possible to reduce the risk of ignition or spread of wildfire to structures on adjacent improved parcels.

SECTION 2: **APPLICATION OF ORDINANCE**

2.1 This Ordinance is enacted pursuant to the powers granted to EDHCWD concerning the abatement of hazardous vegetation and combustible material as contained within California Health & Safety Code (HSC) Sections 13861(h), 13879 and 14875 et seq., and 14930 as well as authority granted under El Dorado County Codes & Ordinances (EDCC) Chapter 8.09, California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299.01 to .05, California Code of Regulations Title 19 §3.07 and California Code of Regulations Title 24, Part 9 (California Fire Code) Chapter 49, as amended. Additional authority for the abatement of nuisances, establishment of procedures, and establishment of real property lines through EDHCWD is provided in *applicable governing codes and regulations of the State of California*.

2.2 This Ordinance applies to Unimproved Properties regardless of size. The abatement of Hazardous Vegetation posing a Fire Hazard in the community shall occur in accordance with the regulations described in this Ordinance by no later than May 1st each year unless otherwise directed by the Fire Code Official. It shall be the duty of every owner, occupant, and person in control of an Unimproved Parcel of land or having an interest therein, to abate therefrom, and from all Unimproved Parcels of land, all Hazardous Vegetation, that constitutes a Fire Hazard and public nuisance which may endanger or damage neighboring property or forestland.

SECTION 3: **DEFINITIONS**

As used in this Ordinance, the following definitions shall apply:

3.1 **Abate or Abatement** means an act used to remove, destroy, eliminate, seize, impound, or any action taken to mitigate a public nuisance.

3.2 **Abatement Costs** means all costs incurred by the EDHCWD to enforce this ordinance and to abate the hazardous vegetation or combustible material on any property pursuant to this Article, including physical abatement costs, administration fees and any additional actual costs incurred for the abatement proceeding(s), including attorney's fees, if applicable.

3.3 **Biomass** means all green waste material generated during a fuel treatment project. Biomass includes, without limitation, all grass, weeds, vegetation, and tree trimmings.

3.4 **Board** means the Governing Board for the El Dorado Hills County Water District.

3.5 **California Fire Code (CFC)** means code provisions found within California Code of Regulations Title 24, Part 9, as amended locally by EDHCWD.

3.6 **Citation or Administrative Citation** means a civil citation issued pursuant to the Ordinance stating there has been a violation of one or more provisions and setting the amount of the civil penalty to be paid by the responsible party.

3.7 **Combustible Material** means all rubbish, litter, or material of any kind other than hazardous vegetation that is combustible and endangers the public safety by creating a fire hazard.

3.8 **Days** means calendar days.

3.9 **Defensible Space** means that area described in California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299.02, Government Code 51182, Public Resources Code Section 4291, El Dorado County Codes & Ordinances Chapter 8.09 and as otherwise described in this Code, which is adjacent to each side of a building or Structure and must be cleared of Hazardous Vegetation, or Combustible Material, as set forth in this Ordinance.

3.10 **EDHCWD** means the El Dorado Hills County Water District of El Dorado County, a political subdivision of the State of California.

3.11 **Fire Code Official** means the fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative.

3.12 **Fire Hazard** means any condition, arrangement, act, or omission which:

3.12.1 Increases, or may cause an increase of hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing, or extinguishing fire; or

3.12.2 May obstruct, delay, hinder, or interfere with the operations of a fire department or the egress of occupants in the event of fire.

3.13 **Fire Safe Plan** means a document prepared for a specific project or development proposed for a Wildland-Urban Interface (WUI) Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

3.14 **Hazardous Vegetation** means any vegetation that is combustible and endangers the public safety by creating a fire hazard. Hazardous Vegetation includes material that in its natural state will readily ignite, burn, and transmit fire from native or landscape plants to any structure or other vegetation. Hazardous Vegetation includes, but is not limited to, dry grass and leaves, brush, weeds, green waste, dead or dying trees, low-hanging branches, litter, or other flammable vegetation that can create a Fire Hazard. Hazardous Vegetation shall not include a commercial agricultural crop that is being actively grown and managed by the property owner or his or her legal tenant.

3.15 **Heritage Tree** means any mature tree or mature stand of trees designated by the County of El Dorado as having historic or cultural significance.

3.16 **Improved Parcel.** Means a portion of real property of any size which is located in an area primarily intended for residential uses, the area of which is determined by the assessor's maps and records, and which may be identified by an Assessor's Parcel Number, upon which a structure is located.

3.17 **Ladder Fuels** means fuels that can carry a fire vertically between or within Combustible Material or Hazardous Vegetation.

3.18 **Parcel** means a portion of real property of any size, the area of which is determined by the Assessor's maps and records, and which may be identified by an Assessor's Parcel Number.

3.19 **Real Estate Transaction** means the transfer of real property between individuals or entities.

3.20 **Responsible Person(s)** means an owner, tenant, occupant, lessor, manager, licensee, political subdivision, local government agency, municipality, or other person having control over a Structure or parcel of land or, to the fullest extent allowed by law, the parent or legal guardian of any person under 18 years who have done any act for which a penalty may be imposed under this Ordinance, or any other person required to comply with the provisions of the Ordinance and, any other lien holder, secured party, or other person who has properly recorded a security interest or other appropriate document evidencing an interest in the property, which has been recorded in the official records of the County.

3.21 **Roadway.** means a road or roadway that is any County street or road, other public road or alley, or private thoroughfare at least ten (10) feet wide that is ordinarily used for vehicular travel, open to public travel, and connects with a County road, state highway, other public road, private road or an alley which affords primary access to an abutting lot. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane, and access roadway.

3.22 **Rubbish** includes, but is not limited to, non-putrescible Wastes, such as paper, cardboard, grass clippings, tree, or shrub trimmings, leaves and needles, wood chips used in landscaping or within five feet of a Structure, bedding, crockery, rubber tires, construction Waste and similar Waste materials.

3.23 **Slash** means the woody debris remaining on the ground after fuels management work: Slash includes, but is not limited to, treetops, branches, bark, chunks, cull logs, uprooted stumps, and uprooted trees.

3.24 **Softwood** means the wood from a conifer (such as pine, cedar, fir, or spruce) as distinguished from that of broadleaved trees.

3.25 **Structure** means any dwelling, house, building, or other type of combustible construction, whether or not occupied, including but not limited to a wood fence located within the Defensible Space of any other Structure.

3.26 **Unimproved Parcel** means a portion of land of any size, the area of which is determined by the Assessor's maps and records and may be identified by an Assessor's Parcel Number (APN) upon which no Structure is located.

3.27 **Vegetation** means plants considered collectively, especially those found in a particular area or habitat. For the purposes of this Ordinance any tree less than six inches in diameter is considered Vegetation.

3.28 **Waste** means all putrescible and non-putrescible solid, semi-solid, and liquid wastes, including residential, commercial, and municipal garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, construction, and demolition debris, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded solid wastes and semisolid wastes.

3.29 **Weeds** means Vegetation growing upon streets, sidewalks, or private property, including any of the following types:

3.29.1 Weeds which bear seeds of a downy or wingy nature.

3.29.2 Sagebrush, chaparral, and any other brush or weed which attains such large growth as to become, when dry, a fire menace to adjacent improved property.

3.29.3 Weeds which are otherwise noxious or dangerous.

3.29.4 Poison oak or poison ivy when the conditions constitute a menace to public health.

3.29.5 Dry grass, stubble, brush, litter, or other flammable materials which endanger public safety by creating a fire hazard.

3.29.6 Vegetation that is not pruned or is otherwise neglected so as to attain such large growth as to become, when dry, a fire menace to adjacent property.

3.30 **Wildfire Risk Area** means land that is covered with grass, grain, brush or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon it would present an abnormally difficult job of suppression or would result in great or unusual damage through fire or such areas designated by the Fire Code Official.

SECTION 4: CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

4.1 The subject project is Categorically Exempt (Class 4) from provisions of CEQA, pursuant to 14 CCR section 15304.

4.2 The subject project is also exempt under the "common sense" exemption in 14 CCR section 15061(b)(3) because it does not involve activity that will have a significant effect on the environment.

SECTION 5: CLEARANCE OF HAZARDOUS VEGETATION ON UNIMPROVED PARCELS

5.1 All Hazardous Vegetation shall be removed on Unimproved Parcels that are one (1.0) acre in size or smaller.

5.1.1 All dry grass and other Weeds located on the Unimproved Parcel shall be removed or cut to a maximum height of two (2) inches.

5.1.2 Tree limbs within six (6) feet of the ground that permit fire to spread into the tree canopy and promote ember distribution shall be removed.

5.1.3 All downed trees, branches or woody debris smaller than eight (8) inches in diameter located on the ground shall be removed.

5.1.4 Slash, Rubbish and Combustible Material debris piles that can easily support fire ignition and spread shall be removed.

5.2 All Hazardous Vegetation shall be removed on Unimproved Parcels over one-acre (1.01) in size to provide defensible space within one hundred (100) feet from Structure(s) and twenty (20) feet along roadways.

5.2.1 All dry grass and other Weeds located within the designated defensible space zone shall be removed or cut to a maximum height of two (2) inches.

5.2.2 Tree limbs within six (6) feet of the ground that permit fire to spread into the canopy and promote ember distribution shall be removed.

5.2.3 All downed trees, branches, or woody debris smaller than eight (8) inches in diameter located on the ground shall be removed.

5.2.4 Slash, Rubbish and Combustible Material debris piles that can easily support fire ignition and spread shall be removed.

5.2.5 Hazardous Vegetation located within twenty (20) feet of Roadways shall be removed or cut to a maximum height of two (2) inches to reduce fire spread from roadside ignition sources and to maintain emergency evacuation routes for the local community.

Exception: Single specimens of trees if they do not form a means of readily transmitting fire as deemed by the El Dorado Hills Fire Department.

5.3 All Unimproved Parcels, regardless of size, shall comply with the following requirements:

5.3.1 An Unimproved Parcel located within a development subject to a Fire Department approved Fire Safe Plan shall comply with the terms of that plan as required by CFC § 4903 regardless of size.

5.3.2 Unimproved Parcels located in areas designated by the Fire Code Official as a Wildfire Risk Area shall also be evaluated against the provisions of this Ordinance and EDCC Chapter 8.09.

5.3.3 Unimproved Parcels known to contain, or that the property owner believes, may contain habitat for rare, threatened or endangered plant or animal species shall contact the California Department of Fish and Wildlife at least ten (10) days in advance of vegetation management work. If the property owner is aware of any federal or state listed species then the appropriate wildlife agency shall be consulted prior to beginning work. It is possible that a permit may be required from the appropriate agencies (e.g., U.S. Fish and Wildlife Services and/or the California Department of Fish and Wildlife) prior to work beginning on the property.

5.3.4 Agricultural crops and active agricultural operation (e.g., farming, grazing, nursery and winegrape) lands as defined in the EDCC are exempt from meeting the regulations described in this Ordinance.

5.3.5 Heritage Trees are exempt from meeting the regulations described in this Ordinance.

5.3.6 All Slash, Rubbish, or Combustible Material debris shall be chipped or removed from the property.

5.3.7 The Fire Code Official may require greater clearance distances than that specified in Section 5, at their discretion, where public health safety or welfare so dictate, or where geographic, topographic or vegetation circumstances dictate.

SECTION 6: ACCEPTABLE METHODS OF CLEARANCE

6.1 **Disking**. The discs shall be set at an angle sufficient to cut the sod loose and adequately bury the growth of weeds, grass, or noxious vegetation existing at the time. Disking shall include rototilling or cultivating. Disking shall be done each time the growth exceeds six (6) inches in height.

6.2 **Scraping.** Area shall be scraped clear, and all debris shall be removed from the required clear area.

6.3 **Mowing.** Height of vegetation shall not exceed two (2) inches at completion. Mowing shall be done each time growth exceeds six (6) inches in height. Mowing shall include hand-operated weed eaters, flail, and rotary mowers.

6.4 **Spraying.** If sprays or pre-emergent are utilized prior to growth of vegetation, preventing growth of vegetation, then this will be an acceptable method of abatement. Any time growth of vegetation exceeds six (6) inches height, it shall be removed by another acceptable method of abatement.

6.5 **Grading.** Grading shall not take place without all appropriate permits required by the County of El Dorado.

SECTION 7: DUTY TO ABATE HAZARDOUS VEGETATION AND COMBUSTIBLE MATERIALS

7.1 Upon receipt of a notice of violation and order to abate, as discussed in Section 13, it shall be the duty of every owner, occupant and person in control of any improved or unimproved parcel of land or interest therein, which is located in the jurisdiction of EDHCWD to abate there from, and from all parcels, roadways and parkways, except for those roads maintained by the county, all Combustible Material and Hazardous Vegetation, that in the judgment of the Fire Code Official, constitutes a Fire Hazard which may endanger or damage neighboring property pursuant to the requirements of the notice of violation and order to abate received.

7.2 The property owner, occupant and person in control of the land is responsible for the abatement and vegetation management (collectively referred to as the "Responsible Person").

7.3 The Responsible Person shall also comply with all other federal, state and local laws, including environmental protection laws, and obtain permits when necessary.

SECTION 8: CORRECTIVE ACTIONS

8.1 After declaring a Fire Hazard pursuant to this Ordinance, the Fire Code Official may require that the Responsible Person(s) take corrective action(s) to abate the Fire Hazard. Such actions may include, but are not limited to the following:

8.1.1 Removing Hazardous Vegetation, Combustible Material, Weeds, Rubbish, or other obstructions or materials that are a fire hazard.

8.1.2 Taking specific action(s) to come into compliance with the regulations and rules that prescribe the maintenance of defensible space around structures and real property.

SECTION 9: INSPECTIONS BY THE EL DORADO HILLS FIRE DEPARTMENT

9.1 For the purpose of enforcing or administering this Ordinance, the Fire Code Official, may enter upon any Unimproved Parcel for the purpose of inspecting the property or for summary abatement proceedings whenever the Fire Code Official is informed, or has reasonable cause to believe, that Hazardous Vegetation or Combustible Material exists that constitute a condition dangerous or

injurious to the health or welfare of persons or to the public, including the environment, and is a public nuisance, or is otherwise in violation of this Ordinance.

9.2 No person shall interfere with the Fire Code Official while acting in the official course and scope of their duty.

SECTION 10: **REOCCURRING FIRE HAZARD**

10.1 In the case of a parcel containing a Fire Hazard where it has been necessary for the El Dorado Hills Fire Department to Abate as a public nuisance in two consecutive years, and the Fire Hazard is seasonal or recurring, the Governing Board of EDHCWD may declare such a parcel to be a seasonal public nuisance.

10.2 As to such parcels constituting a seasonal Fire Hazard, the Fire Code Official may mail a notice to the Responsible Person(s) of the property at the address that appears upon the current assessment roll. The notice shall contain the information prescribed in Health and Safety Code Section 14900.6.

10.3 If the nuisance is not Abated by the Responsible Person(s) within the time specified, the El Dorado Hills Fire Department may proceed to Abate the property and recover costs for doing so, pursuant to Health and Safety Code sections 149001 and 14902, and as provided for in this Ordinance.

SECTION 11: **PENALTIES**

11.1 Failure to comply with the provisions described in this Ordinance may result in the issuance of an Administrative Citation by the El Dorado Hills Fire Department, or a declaration by the Board that the condition on the parcel constitute a public nuisance to be abated at the Responsible Person(s) expense.

11.2 Every violation of this Ordinance is punishable by:

11.2.1 A fine not exceeding $100.00 for the first violation; and

11.2.2 A fine not exceeding $200.00 for the second violation within three years; and

11.2.3 A fine not exceeding $500.00 for each additional violation within three years.

11.3 Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement action by EDHCWD.

11.4 All fines shall be payable to EDHCWD unless otherwise directed in the Notice of Violation and Order to Correct.

11.5 For all delinquent unpaid administrative fines, there shall be a penalty imposed in accordance with the provisions of this Ordinance. The delinquency date for an administrative fine shall be 30 days

following the imposition of the fine or the administrative determination of the Board, whichever is later.

11.6 The right to and procedures for requesting an administrative hearing are detailed in Section 13.

SECTION 12: ABATEMENT OF NUISANCE BY FIRE CODE OFFICIAL

12.1 Any condition caused, maintained, or permitted to exist in violation of any provisions of this Ordinance may be Abated by the Fire Code Official, pursuant to the procedures set forth in Section 13.

SECTION 13: ABATEMENT PROCEDURES

13.1 An Initial Notice to Abate Fire Hazard and Destroy Weeds shall be sent by U.S. Mail or other approved means to all unimproved property owners of parcels by April 15th of each year.

13.2 If the property is still deemed a Fire Hazard on or after May 1st of each year a Final Notice to Abate Fire Hazard and Destroy Weeds will be mailed to the property owner by certified U.S. Mail. In addition to the mailed notice, the property will have one or more signs conforming with the provisions of California Health and Safety Code (HSC) §§ 14891-14894 placed on them to notify the property owner of the notice to abate this concern.

13.3 The property owner will have no less than ten (10) days to abate the Fire Hazard or appeal this decision to the EDHCWD board at their May monthly meeting. If the Fire Hazard has not been abated by the end of the 10-day notice, or the end of the appeal period, whichever is greater, the EDHCWD will dispatch a weed abatement contractor to abate the Fire Hazard in accordance with the provisions of this Ordinance.

13.4 A notice of the hearing prescribed in HSC § 14892 shall be published once in a newspaper of general circulation printed and published in the county, not less than 10 days prior to the date of the hearing.

13.5 The amount of the cost for abating the Fire Hazard and the amount incurred by the Fire Department in enforcing abatement shall constitute a special assessment against the property from which removal occurs and are a lien on the property for the respective assessments as described in the current EDHCWD resolution.

SECTION 14: REAL ESTATE TRANSACTIONS

14.1 Prior to close of any Real Estate Transaction subject to Civil Code section 1102.19 within EDHCWD, the seller of any real property must obtain documentation from the Fire Code Official that the property is in compliance with this Ordinance and provide that documentation to the buyer at or before the close of escrow. If documentation of compliance is not available at the time of

escrow, the buyer shall obtain documentation from the Fire Code Official stating the property is in compliance with this Ordinance within 90 days after the close of escrow, unless otherwise approved by the Fire Code Official.

SECTION 15: **CONFLICT**

15.1 The operation of this Ordinance shall in no way change or diminish the application of other ordinances of EDHCWD dealing with like or similar matters. In any case where a provision of this Ordinance is found in conflict with a provision of any zoning, building, fire safety, or health ordinance or any other section of the EDCC, including fines, the provision which establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail.

15.2 It is not intended by this Ordinance to repeal, abrogate, annul, or in any way impair or interfere with existing provisions of other laws or ordinances or with private restrictions placed upon property by covenant, deed, or other private agreement except those specifically repealed by this Ordinance. In cases where two or more provisions of this or any other Ordinance conflict, the most stringent or restrictive shall prevail.

SECTION 16: **SEVERABILITY**

16.1 If any Ordinance, article, subsection or subdivision thereof, provision, sentence, clause or phrase of this code, or any application thereof, is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the remaining provisions of this code, which can be given effect without the invalid portions and, therefore, such invalid portions are declared to be severable.

16.2 The EDHCWD hereby declares that it would have enacted this Ordinance and each of its articles, sections, subsections, or subdivisions thereof, provisions, sentences, clauses or phrases irrespective of the fact that one or more of them is declared invalid.

SECTION 17: **EFFECTIVE DATE AND PUBLICATION**

17.1 This Ordinance shall take effect thirty (30) days after its adoption. The EDHCWD Board Secretary is directed to publish this Ordinance in a newspaper of general circulation in the District. In lieu of publication of the full text of the ordinance, a summary of the ordinance may be published by the by the Board Secretary within fifteen (15) days after its passage and a certified

copy shall be posted in the office of the EDHCWD pursuant to *Government Code Section 36933(c) (1).*

17.2 The above Ordinance was introduced at a meeting of the Board of Directors of the EDHCWD on {3/29/23}, and it was then read for the first time. A public hearing was set for the Ordinance to be read for the second time on { 4/25/23 } and approved by the following vote:

PASSED AND ADOPTED by the Board of Directors of the EDHCWD this, 25th day of April, 2023.

AYES: 5

NOES: 0

ABSENT: 0

ABSTAIN: 0

John Giraudo, Board President

ATTEST:

Jessica Braddock, Board Secretary

90

Appendix O

Ordinance 2023-1 – El Dorado County/EDHFD

EL DORADO HILLS COUNTY WATER DISTRICT

EL DORADO HILLS FIRE DEPARTMENT

ORDINANCE NO. 2023-01

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE EL DORADO HILLS COUNTY WATER DISTRICT AS FOLLOWS:

AN ORDINANCE OF THE EL DORADO HILLS COUNTY WATER DISTRICT RELATED TO HAZARDOUS VEGETATION MANAGEMENT ON UNIMPROVED PARCELS, AND DECLARING CERTAIN HAZAROUS VEGETATION AND COMBUSTIBLE MATERIALS A PUBLIC NUISANCE, AND PROVIDING FOR THE REMOVAL THEREOF.

Be it ORDAINED by the Board of Directors of the El Dorado Hills County Water District (EDHCWD), also known as the El Dorado Hills Fire Department:

Section 1: **FINDINGS OF FACTS**

Section 2: **APPLICATION OF ORDINANCE**

Section 3: **DEFINITONS**

Section 4: **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Section 5: **CLEARANCE OF HAZARDOUS VEGETATION ON UNIMPROVED PARCELS**

Section 6: **ACCEPTABLE METHODS OF CLEARANCE**

Section 7: **DUTY TO ABATE HAZARDOUS VEGETATION AND COMBUSTIBLE MATERIAL**

Section 8: **CORRECTIVE ACTIONS**

Section 9: **INSPECTIONS BY THE EL DORADO HILLS FIRE DEPARTMENT**

Section 10: **REOCCURRING FIRE HAZARD**

Section 11: **PENALTIES**

Section 12: **ABATEMENT OF NUISANCE BY FIRE CODE OFFICIAL**

Section 13: **ABATEMENT PROCEDURES**

Section 14: **REAL ESTATE TRANSACTIONS**

Section 15: **CONFLICT**

Section 16: **SEVERABILITY**

Section 17: **EFFECTIVE DATE AND PUBLICATION**

92

SECTION 1: **FINDINGS OF FACTS**

1.1 The El Dorado Hills County Water District (EDHCWD), also known as the El Dorado Hills Fire Department, is an independent water district established under Division 12, Part 2, Article 7, Section 31120[1] of the State Water Code; and

1.2 It is the intent of the Governing Board of EDHCWD that this Ordinance shall apply to an annual program for the Abatement of the growth and/or accumulation of weeds, grasses, shrubs, dormant brush, slash, tree limbs, hazardous vegetation and combustible materials on all designated Unimproved Parcels within the EDHCWD and maintenance of those parcels to prevent vegetation from growing back; and

1.3 All parcels within the EDHCWD have been identified and designated as being within either a State Responsibility Area (SRA) or Local Responsibility Area (LRA) Moderate, High or Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE) in accordance with the Fire and Resource Assessment Program (FRAP) Map; and

1.4 During the fire season, the EDHCWD generally has a dry, arid climate conducive to wildfires. EDHCWD has a very diverse and complex landscape, which includes dry, brush-covered, and grass-covered wildlands, mountainous areas, and other terrains which are home to many sensitive plant and animal species. Many of the EDHCWD's native and non-native plant species can be highly combustible during normal dry periods and have contributed to significant wildfires within the EDHCWD. Difficult topography, terrain, and weather conditions exacerbate the fire danger and the difficulty of fighting wildfires, and have resulted in catastrophic fire losses to life, property, and the environment; and

1.5 Catastrophic wildfire events pose a serious threat to the preservation of public peace, health and safety within any wildland urban interface and intermix communities. The proper implementation and enforcement of hazardous fuel regulations and landscaping requirements have been proven to reduce the impact from destructive wildfires through the mitigation of hazardous fuel conditions around homes and roadways; and

1.6 Wildfires with extreme fire behavior are occurring more often and growing larger in size. Eighteen (18) of the twenty (20) most destructive wildland fires in the State of California have occurred between 2002-2022. The County of El Dorado has a history of destructive wildfires which have burned within its boundaries. These include the 2007 Angora Fire, 2014 King Fire,

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[1] A district may exercise any of the powers, functions, and duties which are vested in, or imposed upon, a fire protection district pursuant to the Fire Protection District Law of 1987, Part 3 (commencing with Section 13800) of Division 12 of the Health and Safety Code.

2021 Caldor Fire and the 2022 Mosquito Fire. Climate change stressors, such as increased average air temperature, precipitation variability, reduced snowpack, drought and tree mortality, will lead to an increased frequency of large wildfires that will create adverse impacts on local communities in the County of El Dorado, including both El Dorado Hills and Latrobe; and

1.7 Of paramount importance to the Governing Board of EDHCWD and the citizens of El Dorado Hills and Latrobe are the protection of lives and structures from the threat of wildfire, and the safety of public safety personnel during wildfires. The proper maintenance of defensible space on Unimproved Parcels benefits property owners, public safety personnel, and all citizens of both El Dorado Hills and Latrobe by dramatically increasing the likelihood that structures will survive a wildfire, provides for firefighter safety during a wildfire, and generally aids in the protection of lives, property, and the environment; and

1.8 The Governing Board of EDHCWD finds and declares that the uncontrolled growth and/or accumulation of weeds, grasses, hazardous vegetation and combustible materials or obstructions on sidewalks, streets, and on lands or lots within the EDHCWD is dangerous or injurious to neighboring property and the health, safety, and welfare of residents of the EDHCWD. Such growth and accumulation constitute a public nuisance in that it creates fire hazards, reduces the value of private property, promotes blight and deterioration, invites plundering, constitutes an unattractive nuisance, and creates a hazard to the health, safety, and general welfare of the public; and

1.9 The purpose of this Ordinance is to provide for the removal of hazardous vegetation and combustible material from around the exterior of improvements situated in the jurisdiction of the EDHCWD to reduce the potential for fire and to promote the public health, safety, and welfare of the community. It is the further purpose of this Ordinance to establish a hazardous vegetation reduction program that provides a process to identify and abate hazardous vegetation on parcels and protect the lives and property of the citizens of the EDHCWD, while at the same time protecting sensitive plant and animal species and protecting against significant erosion and sedimentation. The removal of hazardous vegetation in the areas subject to this Ordinance is recognized as an essential action homeowners and property owners can take to increase the chances that homes, structures and other property will survive a wildfire, while protecting the natural environment. Regular fuels management and modifications consistent with the requirements of this Ordinance is necessary to ensure adequate defensible space is achieved; and

1.10 The defensible space required by this Ordinance is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structures, and there is no other feasible

mitigation measure possible to reduce the risk of ignition or spread of wildfire to structures on adjacent improved parcels.

SECTION 2: **APPLICATION OF ORDINANCE**

2.1 This Ordinance is enacted pursuant to the powers granted to EDHCWD concerning the abatement of hazardous vegetation and combustible material as contained within California Health & Safety Code (HSC) Sections 13861(h), 13879 and 14875 et seq., and 14930 as well as authority granted under El Dorado County Codes & Ordinances (EDCC) Chapter 8.09, California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299.01 to .05, California Code of Regulations Title 19 §3.07 and California Code of Regulations Title 24, Part 9 (California Fire Code) Chapter 49, as amended. Additional authority for the abatement of nuisances, establishment of procedures, and establishment of real property lines through EDHCWD is provided in *applicable governing codes and regulations of the State of California*.

2.2 This Ordinance applies to Unimproved Properties regardless of size. The abatement of Hazardous Vegetation posing a Fire Hazard in the community shall occur in accordance with the regulations described in this Ordinance by no later than May 1st each year unless otherwise directed by the Fire Code Official. It shall be the duty of every owner, occupant, and person in control of an Unimproved Parcel of land or having an interest therein, to abate therefrom, and from all Unimproved Parcels of land, all Hazardous Vegetation, that constitutes a Fire Hazard and public nuisance which may endanger or damage neighboring property or forestland.

SECTION 3: **DEFINITIONS**

As used in this Ordinance, the following definitions shall apply:

3.1 **Abate or Abatement** means an act used to remove, destroy, eliminate, seize, impound, or any action taken to mitigate a public nuisance.

3.2 **Abatement Costs** means all costs incurred by the EDHCWD to enforce this ordinance and to abate the hazardous vegetation or combustible material on any property pursuant to this Article, including physical abatement costs, administration fees and any additional actual costs incurred for the abatement proceeding(s), including attorney's fees, if applicable.

3.3 **Biomass** means all green waste material generated during a fuel treatment project. Biomass includes, without limitation, all grass, weeds, vegetation, and tree trimmings.

3.4 **Board** means the Governing Board for the El Dorado Hills County Water District.

3.5 **California Fire Code (CFC)** means code provisions found within California Code of Regulations Title 24, Part 9, as amended locally by EDHCWD.

3.6 **Citation or Administrative Citation** means a civil citation issued pursuant to the Ordinance stating there has been a violation of one or more provisions and setting the amount of the civil penalty to be paid by the responsible party.

3.7 **Combustible Material** means all rubbish, litter, or material of any kind other than hazardous vegetation that is combustible and endangers the public safety by creating a fire hazard.

3.8 **Days** means calendar days.

3.9 **Defensible Space** means that area described in California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299.02, Government Code 51182, Public Resources Code Section 4291, El Dorado County Codes & Ordinances Chapter 8.09 and as otherwise described in this Code, which is adjacent to each side of a building or Structure and must be cleared of Hazardous Vegetation, or Combustible Material, as set forth in this Ordinance.

3.10 **EDHCWD** means the El Dorado Hills County Water District of El Dorado County, a political subdivision of the State of California.

3.11 **Fire Code Official** means the fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative.

3.12 **Fire Hazard** means any condition, arrangement, act, or omission which:

3.12.1 Increases, or may cause an increase of hazard or menace of fire to a greater degree than that customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing, or extinguishing fire; or

3.12.2 May obstruct, delay, hinder, or interfere with the operations of a fire department or the egress of occupants in the event of fire.

3.13 **Fire Safe Plan** means a document prepared for a specific project or development proposed for a Wildland-Urban Interface (WUI) Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

3.14 **Hazardous Vegetation** means any vegetation that is combustible and endangers the public safety by creating a fire hazard. Hazardous Vegetation includes material that in its natural state will readily ignite, burn, and transmit fire from native or landscape plants to any structure or other vegetation. Hazardous Vegetation includes, but is not limited to, dry grass and leaves, brush, weeds, green waste, dead or dying trees, low-hanging branches, litter, or other flammable vegetation that can create a Fire Hazard. Hazardous Vegetation shall not include a commercial agricultural crop that is being actively grown and managed by the property owner or his or her legal tenant.

3.15 **Heritage Tree** means any mature tree or mature stand of trees designated by the County of El Dorado as having historic or cultural significance.

3.16 **Improved Parcel.** Means a portion of real property of any size which is located in an area primarily intended for residential uses, the area of which is determined by the assessor's maps and records, and which may be identified by an Assessor's Parcel Number, upon which a structure is located.

3.17 **Ladder Fuels** means fuels that can carry a fire vertically between or within Combustible Material or Hazardous Vegetation.

3.18 **Parcel** means a portion of real property of any size, the area of which is determined by the Assessor's maps and records, and which may be identified by an Assessor's Parcel Number.

3.19 **Real Estate Transaction** means the transfer of real property between individuals or entities.

3.20 **Responsible Person(s)** means an owner, tenant, occupant, lessor, manager, licensee, political subdivision, local government agency, municipality, or other person having control over a Structure or parcel of land or, to the fullest extent allowed by law, the parent or legal guardian of any person under 18 years who have done any act for which a penalty may be imposed under this Ordinance, or any other person required to comply with the provisions of the Ordinance and, any other lien holder, secured party, or other person who has properly recorded a security interest or other appropriate document evidencing an interest in the property, which has been recorded in the official records of the County.

3.21 **Roadway.** means a road or roadway that is any County street or road, other public road or alley, or private thoroughfare at least ten (10) feet wide that is ordinarily used for vehicular travel, open to public travel, and connects with a County road, state highway, other public road, private road or an alley which affords primary access to an abutting lot. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane, and access roadway.

3.22 **Rubbish** includes, but is not limited to, non-putrescible Wastes, such as paper, cardboard, grass clippings, tree, or shrub trimmings, leaves and needles, wood chips used in landscaping or within five feet of a Structure, bedding, crockery, rubber tires, construction Waste and similar Waste materials.

3.23 **Slash** means the woody debris remaining on the ground after fuels management work: Slash includes, but is not limited to, treetops, branches, bark, chunks, cull logs, uprooted stumps, and uprooted trees.

3.24 **Softwood** means the wood from a conifer (such as pine, cedar, fir, or spruce) as distinguished from that of broadleaved trees.

97

3.25 **Structure** means any dwelling, house, building, or other type of combustible construction, whether or not occupied, including but not limited to a wood fence located within the Defensible Space of any other Structure.

3.26 **Unimproved Parcel** means a portion of land of any size, the area of which is determined by the Assessor's maps and records and may be identified by an Assessor's Parcel Number (APN) upon which no Structure is located.

3.27 **Vegetation** means plants considered collectively, especially those found in a particular area or habitat. For the purposes of this Ordinance any tree less than six inches in diameter is considered Vegetation.

3.28 **Waste** means all putrescible and non-putrescible solid, semi-solid, and liquid wastes, including residential, commercial, and municipal garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, construction, and demolition debris, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded solid wastes and semisolid wastes.

3.29 **Weeds** means Vegetation growing upon streets, sidewalks, or private property, including any of the following types:

3.29.1 Weeds which bear seeds of a downy or wingy nature.

3.29.2 Sagebrush, chaparral, and any other brush or weed which attains such large growth as to become, when dry, a fire menace to adjacent improved property.

3.29.3 Weeds which are otherwise noxious or dangerous.

3.29.4 Poison oak or poison ivy when the conditions constitute a menace to public health.

3.29.5 Dry grass, stubble, brush, litter, or other flammable materials which endanger public safety by creating a fire hazard.

3.29.6 Vegetation that is not pruned or is otherwise neglected so as to attain such large growth as to become, when dry, a fire menace to adjacent property.

3.30 **Wildfire Risk Area** means land that is covered with grass, grain, brush or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon it would present an abnormally difficult job of suppression or would result in great or unusual damage through fire or such areas designated by the Fire Code Official.

SECTION 4: CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

4.1 The subject project is Categorically Exempt (Class 4) from provisions of CEQA, pursuant to 14 CCR section 15304.

4.2 The subject project is also exempt under the "common sense" exemption in 14 CCR section 15061(b)(3) because it does not involve activity that will have a significant effect on the environment.

SECTION 5: CLEARANCE OF HAZARDOUS VEGETATION ON UNIMPROVED PARCELS

5.1 All Hazardous Vegetation shall be removed on Unimproved Parcels that are one (1.0) acre in size or smaller.

5.1.1 All dry grass and other Weeds located on the Unimproved Parcel shall be removed or cut to a maximum height of two (2) inches.

5.1.2 Tree limbs within six (6) feet of the ground that permit fire to spread into the tree canopy and promote ember distribution shall be removed.

5.1.3 All downed trees, branches or woody debris smaller than eight (8) inches in diameter located on the ground shall be removed.

5.1.4 Slash, Rubbish and Combustible Material debris piles that can easily support fire ignition and spread shall be removed.

5.2 All Hazardous Vegetation shall be removed on Unimproved Parcels over one-acre (1.01) in size to provide defensible space within one hundred (100) feet from Structure(s) and twenty (20) feet along roadways.

5.2.1 All dry grass and other Weeds located within the designated defensible space zone shall be removed or cut to a maximum height of two (2) inches.

5.2.2 Tree limbs within six (6) feet of the ground that permit fire to spread into the canopy and promote ember distribution shall be removed.

5.2.3 All downed trees, branches, or woody debris smaller than eight (8) inches in diameter located on the ground shall be removed.

5.2.4 Slash, Rubbish and Combustible Material debris piles that can easily support fire ignition and spread shall be removed.

5.2.5 Hazardous Vegetation located within twenty (20) feet of Roadways shall be removed or cut to a maximum height of two (2) inches to reduce fire spread from roadside ignition sources and to maintain emergency evacuation routes for the local community.

Exception: Single specimens of trees if they do not form a means of readily transmitting fire as deemed by the El Dorado Hills Fire Department.

5.3 All Unimproved Parcels, regardless of size, shall comply with the following requirements:

5.3.1 An Unimproved Parcel located within a development subject to a Fire Department approved Fire Safe Plan shall comply with the terms of that plan as required by CFC § 4903 regardless of size.

5.3.2 Unimproved Parcels located in areas designated by the Fire Code Official as a Wildfire Risk Area shall also be evaluated against the provisions of this Ordinance and EDCC Chapter 8.09.

5.3.3 Unimproved Parcels known to contain, or that the property owner believes, may contain habitat for rare, threatened or endangered plant or animal species shall contact the California Department of Fish and Wildlife at least ten (10) days in advance of vegetation management work. If the property owner is aware of any federal or state listed species then the appropriate wildlife agency shall be consulted prior to beginning work. It is possible that a permit may be required from the appropriate agencies (e.g., U.S. Fish and Wildlife Services and/or the California Department of Fish and Wildlife) prior to work beginning on the property.

5.3.4 Agricultural crops and active agricultural operation (e.g., farming, grazing, nursery and winegrape) lands as defined in the EDCC are exempt from meeting the regulations described in this Ordinance.

5.3.5 Heritage Trees are exempt from meeting the regulations described in this Ordinance.

5.3.6 All Slash, Rubbish, or Combustible Material debris shall be chipped or removed from the property.

5.3.7 The Fire Code Official may require greater clearance distances than that specified in Section 5, at their discretion, where public health safety or welfare so dictate, or where geographic, topographic or vegetation circumstances dictate.

SECTION 6: ACCEPTABLE METHODS OF CLEARANCE

6.1 **Disking**. The discs shall be set at an angle sufficient to cut the sod loose and adequately bury the growth of weeds, grass, or noxious vegetation existing at the time. Disking shall include rototilling or cultivating. Disking shall be done each time the growth exceeds six (6) inches in height.

6.2 **Scraping.** Area shall be scraped clear, and all debris shall be removed from the required clear area.

6.3 **Mowing.** Height of vegetation shall not exceed two (2) inches at completion. Mowing shall be done each time growth exceeds six (6) inches in height. Mowing shall include hand-operated weed eaters, flail, and rotary mowers.

6.4 **Spraying.** If sprays or pre-emergent are utilized prior to growth of vegetation, preventing growth of vegetation, then this will be an acceptable method of abatement. Any time growth of vegetation exceeds six (6) inches height, it shall be removed by another acceptable method of abatement.

6.5 **Grading.** Grading shall not take place without all appropriate permits required by the County of El Dorado.

SECTION 7: DUTY TO ABATE HAZARDOUS VEGETATION AND COMBUSTIBLE MATERIALS

7.1 Upon receipt of a notice of violation and order to abate, as discussed in Section 13, it shall be the duty of every owner, occupant and person in control of any improved or unimproved parcel of land or interest therein, which is located in the jurisdiction of EDHCWD to abate there from, and from all parcels, roadways and parkways, except for those roads maintained by the county, all Combustible Material and Hazardous Vegetation, that in the judgment of the Fire Code Official, constitutes a Fire Hazard which may endanger or damage neighboring property pursuant to the requirements of the notice of violation and order to abate received.

7.2 The property owner, occupant and person in control of the land is responsible for the abatement and vegetation management (collectively referred to as the "Responsible Person").

7.3 The Responsible Person shall also comply with all other federal, state and local laws, including environmental protection laws, and obtain permits when necessary.

SECTION 8: CORRECTIVE ACTIONS

8.1 After declaring a Fire Hazard pursuant to this Ordinance, the Fire Code Official may require that the Responsible Person(s) take corrective action(s) to abate the Fire Hazard. Such actions may include, but are not limited to the following:

8.1.1 Removing Hazardous Vegetation, Combustible Material, Weeds, Rubbish, or other obstructions or materials that are a fire hazard.

8.1.2 Taking specific action(s) to come into compliance with the regulations and rules that prescribe the maintenance of defensible space around structures and real property.

SECTION 9: INSPECTIONS BY THE EL DORADO HILLS FIRE DEPARTMENT

9.1 For the purpose of enforcing or administering this Ordinance, the Fire Code Official, may enter upon any Unimproved Parcel for the purpose of inspecting the property or for summary abatement proceedings whenever the Fire Code Official is informed, or has reasonable cause to believe, that Hazardous Vegetation or Combustible Material exists that constitute a condition dangerous or

injurious to the health or welfare of persons or to the public, including the environment, and is a public nuisance, or is otherwise in violation of this Ordinance.

9.2 No person shall interfere with the Fire Code Official while acting in the official course and scope of their duty.

SECTION 10: **REOCCURRING FIRE HAZARD**

10.1 In the case of a parcel containing a Fire Hazard where it has been necessary for the El Dorado Hills Fire Department to Abate as a public nuisance in two consecutive years, and the Fire Hazard is seasonal or recurring, the Governing Board of EDHCWD may declare such a parcel to be a seasonal public nuisance.

10.2 As to such parcels constituting a seasonal Fire Hazard, the Fire Code Official may mail a notice to the Responsible Person(s) of the property at the address that appears upon the current assessment roll. The notice shall contain the information prescribed in Health and Safety Code Section 14900.6.

10.3 If the nuisance is not Abated by the Responsible Person(s) within the time specified, the El Dorado Hills Fire Department may proceed to Abate the property and recover costs for doing so, pursuant to Health and Safety Code sections 149001 and 14902, and as provided for in this Ordinance.

SECTION 11: **PENALTIES**

11.1 Failure to comply with the provisions described in this Ordinance may result in the issuance of an Administrative Citation by the El Dorado Hills Fire Department, or a declaration by the Board that the condition on the parcel constitute a public nuisance to be abated at the Responsible Person(s) expense.

11.2 Every violation of this Ordinance is punishable by:

11.2.1 A fine not exceeding $100.00 for the first violation; and

11.2.2 A fine not exceeding $200.00 for the second violation within three years; and

11.2.3 A fine not exceeding $500.00 for each additional violation within three years.

11.3 Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement action by EDHCWD.

11.4 All fines shall be payable to EDHCWD unless otherwise directed in the Notice of Violation and Order to Correct.

11.5 For all delinquent unpaid administrative fines, there shall be a penalty imposed in accordance with the provisions of this Ordinance. The delinquency date for an administrative fine shall be 30 days

following the imposition of the fine or the administrative determination of the Board, whichever is later.

11.6 The right to and procedures for requesting an administrative hearing are detailed in Section 13.

SECTION 12: ABATEMENT OF NUISANCE BY FIRE CODE OFFICIAL

12.1 Any condition caused, maintained, or permitted to exist in violation of any provisions of this Ordinance may be Abated by the Fire Code Official, pursuant to the procedures set forth in Section 13.

SECTION 13: ABATEMENT PROCEDURES

13.1 An Initial Notice to Abate Fire Hazard and Destroy Weeds shall be sent by U.S. Mail or other approved means to all unimproved property owners of parcels by April 15th of each year.

13.2 If the property is still deemed a Fire Hazard on or after May 1st of each year a Final Notice to Abate Fire Hazard and Destroy Weeds will be mailed to the property owner by certified U.S. Mail. In addition to the mailed notice, the property will have one or more signs conforming with the provisions of California Health and Safety Code (HSC) §§ 14891-14894 placed on them to notify the property owner of the notice to abate this concern.

13.3 The property owner will have no less than ten (10) days to abate the Fire Hazard or appeal this decision to the EDHCWD board at their May monthly meeting. If the Fire Hazard has not been abated by the end of the 10-day notice, or the end of the appeal period, whichever is greater, the EDHCWD will dispatch a weed abatement contractor to abate the Fire Hazard in accordance with the provisions of this Ordinance.

13.4 A notice of the hearing prescribed in HSC § 14892 shall be published once in a newspaper of general circulation printed and published in the county, not less than 10 days prior to the date of the hearing.

13.5 The amount of the cost for abating the Fire Hazard and the amount incurred by the Fire Department in enforcing abatement shall constitute a special assessment against the property from which removal occurs and are a lien on the property for the respective assessments as described in the current EDHCWD resolution.

SECTION 14: REAL ESTATE TRANSACTIONS

14.1 Prior to close of any Real Estate Transaction subject to Civil Code section 1102.19 within EDHCWD, the seller of any real property must obtain documentation from the Fire Code Official that the property is in compliance with this Ordinance and provide that documentation to the buyer at or before the close of escrow. If documentation of compliance is not available at the time of

escrow, the buyer shall obtain documentation from the Fire Code Official stating the property is in compliance with this Ordinance within 90 days after the close of escrow, unless otherwise approved by the Fire Code Official.

SECTION 15: **CONFLICT**

15.1 The operation of this Ordinance shall in no way change or diminish the application of other ordinances of EDHCWD dealing with like or similar matters. In any case where a provision of this Ordinance is found in conflict with a provision of any zoning, building, fire safety, or health ordinance or any other section of the EDCC, including fines, the provision which establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail.

15.2 It is not intended by this Ordinance to repeal, abrogate, annul, or in any way impair or interfere with existing provisions of other laws or ordinances or with private restrictions placed upon property by covenant, deed, or other private agreement except those specifically repealed by this Ordinance. In cases where two or more provisions of this or any other Ordinance conflict, the most stringent or restrictive shall prevail.

SECTION 16: **SEVERABILITY**

16.1 If any Ordinance, article, subsection or subdivision thereof, provision, sentence, clause or phrase of this code, or any application thereof, is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the remaining provisions of this code, which can be given effect without the invalid portions and, therefore, such invalid portions are declared to be severable.

16.2 The EDHCWD hereby declares that it would have enacted this Ordinance and each of its articles, sections, subsections, or subdivisions thereof, provisions, sentences, clauses or phrases irrespective of the fact that one or more of them is declared invalid.

SECTION 17: **EFFECTIVE DATE AND PUBLICATION**

17.1 This Ordinance shall take effect thirty (30) days after its adoption. The EDHCWD Board Secretary is directed to publish this Ordinance in a newspaper of general circulation in the District. In lieu of publication of the full text of the ordinance, a summary of the ordinance may be published by the by the Board Secretary within fifteen (15) days after its passage and a certified

copy shall be posted in the office of the EDHCWD pursuant to *Government Code Section 36933(c) (1)*.

17.2 The above Ordinance was introduced at a meeting of the Board of Directors of the EDHCWD on {3/29/23}, and it was then read for the first time. A public hearing was set for the Ordinance to be read for the second time on { 4/25/23 } and approved by the following vote:

PASSED AND ADOPTED by the Board of Directors of the EDHCWD this, 25th day of April, 2023.

AYES: 5

NOES: 0

ABSENT: 0

ABSTAIN: 0

John Giraudo, Board President

ATTEST:

Jessica Braddock, Board Secretary

105

Appendix P

List of Fire Resistant Trees

Common Name	Scientific Name
Interior Live Oak	Quercus wislizeni
Blue Oak	Quercus douglasii
American Mountain Ash	Sorbus americana
Honey locust	Gleditsia triacanthos
Big Leaf Maple	Acer macrophyllum
Olive	Olea europea
River birch	Betula nigra

Note: "Fire resistant" does not mean "fire proof". None of the trees listed above are immune to damage from fire, but if pruned as they mature, they will provide shade and a modified micro-climate under their crowns. The shade they provide will lower ambient temperatures and help to maintain ambient humidity. All species listed will shed leaves in the fall and those leaves will need to be removed to reduce fire hazard.

Appendix Q
Rancho Victoria Subdivision
Fire Hazard Rating
2024 International Wildland Urban Interface Code

C 101.1 Fire Hazard Severity Form

	Points
A. Subdivision Design Points	
1. Ingress/Egress	
a. Two or more Primary Roads	1
2. Width of Primary Road	
a. >/= 20 feet	1
3. Accessibility	
a. Grade </= 5%	
b. Grade > 5%	3
4. Secondary Road Terminus	
a. Loop Roads with outside turn radius 45 ft or more	1
b. Cul de sac turnaround	2
5. Street signs	1
B. Vegetation	
1. Fuel types	
a. Light	
b. Medium	5
c. Heavy	
2. Defensible Space	
a. 70% or more of site	
b. <70% but >/= 30%	10
c. <30%	
C. Topography	
a. </= 8%	
b. >8% but <20%	
c >20% but <30%	7
d.>30%	
D. Roofing material	
a. Class A Fire Rated	1.
E. Fire Protection – Water Source	
a. 500 gpm hydrant within 1000 ft	
b. Hydrant > 1000 ft or drat site	2.
F. Existing Building Construction Material (proposed under county standards)	
a. Non-combustible siding/deck	1
G. Utilities	
a. All underground	
Total points	36

Ratings

Moderate	40-59
High	60-74.
Extreme	75+