Town of Loomis



The Reserve Project Modified Initial Study/15183 Checklist

November 2025

Prepared by



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MODIFIED INITIAL STUDY NOVEMBER 2025



A. PROJECT SUMMARY

1. Project Title: The Reserve Project

2. Lead Agency Name and Address: Town of Loomis

3665 Taylor Road Loomis, CA 95650

3. Lead Agency Contact and Phone Number: Christy Consolini

Planning Director (916) 652-1840

4. Project Location: 5780 Rocklin Road

Loomis, CA 95650

Assessor's Parcel Number (APN): 045-161-033

5. Project Applicant: Stefan Horstschraer

Premier Homes LLC 8483 Douglas Plaza Drive

Granite Bay, CA 95746

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

7. Existing Zoning Designation:

RR

8. Required Approvals from Other Public Agencies:

None

9. Project Location and Setting:

The approximately 26.29-acre project site is located at 5780 Rocklin Road in the Town of Loomis, CA and is identified by APN 045-161-033. The site consists of mostly undeveloped, lightly forested land with an approximately 4.6-acre pond occupying the southwestern portion of the site. The site also includes a single-family residence on the northern border. The project site is generally surrounded by rural single-family residences. Other surrounding land uses include a circular storage tank and a single-family home to the north, across Rocklin Road, and a small strawberry field to the northeast. In addition, a church is located further northeast, across Rocklin Road. The Town of Loomis General Plan designates the site as RR and the site is zoned RR.

10. Project Description Summary:

The Reserve Project (proposed project) would include the subdivision of the project site into a total of 20 single-family residential lots, ranging from 40,000 square feet (sf) to 136,612 sf with an average lot size of 54,628 sf. Residential lots five to ten would include portions of the pond on the southwest portion of the project site. The existing single-family residence on the northern portion of the project site would be demolished for the

development of residential lot 13. The proposed project would also include the development of a new roadway, Reserve Court, off of Barton Road, which is located along the eastern border of the project site. The proposed project would require Town approval of a Tentative Subdivision Map, as well as a Front Setback Variance.

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

Assembly Bill (AB) 52 (Public Resources Code [PRC] Section 21080.3.1) notification to tribes is not required for the proposed project given that this checklist determines no additional environmental review is required for the project, consistent with CEQA Guidelines Section 15183.

B. SOURCES

The following documents are referenced information sources used for the analysis within this Modified Initial Study:

- 1. California Building Standards Commission. 2022 California Green Building Standards Code. 2023.
- 2. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 2025.
- California Department of Forestry and Fire Protection. Fire Hazard Severity Zones in State Responsibility Area. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed July 2025.
- 4. California Department of Resources Recycling and Recovery (CalRecycle). Facility/Site Summary Details: Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2542?siteID=2273. Accessed August 2025.
- 5. California Department of Transportation. *California Scenic Highway Mapping System*. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8 e8057116f1aacaa%20. Accessed November 2024.
- 6. California Department of Transportation. *Work Zone Traffic Control Resources*. Available at: https://dot.ca.gov/programs/safety-programs/workzones. Accessed August 2025.
- 7. California Environmental Protection Agency. *Active CDO and CAO*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed August 2025.
- 8. California Tree and Landscape Consulting, Inc. *Preliminary Arborist Report and Tree Inventory*. September 7, 2022.
- 9. Department of Toxic Substances Control. *EnviroStor.* Available at: https://www.envirostor.dtsc.ca.gov/public/map. Accessed August 2025.
- 10. Kimley Horn. The Reserve Traffic Evaluation. May 27, 2025.
- 11. Loomis Union School District. *Developer Fees.* Available at: https://www.loomisk8.org/123163 3. Accessed August 2025.
- 12. Madrone Ecological Consulting. *Biological Resources Assessment, The Reserve, Town of Loomis, Placer County, California.* September 2025.
- 13. Natural Investigations Company. *Cultural Resources Investigations for the 5280 Rocklin Road Premier Homes, Placer County, California.* April 2024
- 14. Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed August 2025.

- 15. Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
- 16. Placer County Air Pollution Control District. PCAPCD CEQA Handbook. December 2017.
- 17. Placer County. *Placer County 2021 Local Hazard Mitigation Plan.* June 2021. Available at: https://www.placer.ca.gov/1381/Local-Hazard-Mitigation-Plan. Accessed August 2025.
- 18. Placer County Transit Planning Agency. *Annual Unmet Transit Needs Assessment for Fiscal Year 2025/26.* Adopted February 26, 2025.
- 19. Placer Union High School District. School Facility Fees (Developer Fees) as of July 1, 2024. July 2024.
- 20. Premier Homes LLC. The Reserve Fire Management Plan. August 28, 2025.
- 21. South Placer Municipal Utility District. Strategic Plan 2023-2027. September 2022.
- 22. State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/search. Accessed August 2025.
- 23. Town of Loomis. *Town of Loomis Construction Standards*. March 2004. Adopted June 8, 2004.
- 24. Town of Loomis. *Town of Loomis General Plan 2020 2040 Environmental Impact Report.*March 2024.
- 25. Town of Loomis. Town of Loomis General Plan 2020 2040. Adopted April 19, 2024.
- 26. TSD Engineering, Inc. *The Reserve Town of Loomis, CA Preliminary Hydrologic and Hydraulic Study.* July 16, 2025.
- 27. U.S. Census Bureau. *Loomis town, California*. Available at: https://data.census.gov/profile/Loomis_town,_California?g=160XX00US0643140#familie s-and-living-arrangements. Accessed August 2025.
- 28. Water Systems Consultants, Inc. *Placer County Water Agency 2020 Urban Water Management Plan.* June 2021.
- 29. Youngdahl Consulting Group, Inc. *Geotechnical Engineering Study for Premier Montaire*. September 6, 2022.
- 30. Youngdahl Consulting Group, Inc. *Phase I Environmental Site Assessment The Reserve Placer County APN 045-161-033 Loomis, California.* September 5, 2025.
- 31. Youngdahl Consulting Group, Inc. The Reserve Phase II ESA. October 22, 2025.

C. BACKGROUND AND INTRODUCTION

The following provides a background of the proposed project, as well as a description of this Modified Initial Study's approach to evaluating the proposed project's consistency with California Environmental Quality Act (CEQA) Section 15183 and Government Code Sections 65915 through 65918.

CEOA Guidelines Section 15183

This Modified Initial Study 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 CEQA checklist in Appendix G of the CEQA Guidelines.

On April 9, 2024, the Town of Loomis adopted the Town of Loomis General Plan 2020 to 2040,¹ and also certified the associated Environmental Impact Report (EIR) (State Clearinghouse #2022050323).² The current General Plan is the second comprehensive update adopted by the Town. The Town's General Plan EIR is a program-level EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 et seq.).

Town of Loomis. *Town of Loomis General Plan 2020 - 2040.* Adopted April 19, 2024.

² Town of Loomis. Town of Loomis General Plan 2020 - 2040 Environmental Impact Report. March 2024.

The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan.

The Town's General Plan designates the project site RR, which allows a mix of residential and agricultural uses with an allowable density of one dwelling unit per gross acre (du/ac). The proposed project would include the development of 20 single-family residences on a total of 26.29-acres, which results in a density of 0.76 du/ac, consistent with the site's RR land use designation. Pursuant to Section 15183 of the CEQA Guidelines, where a project is consistent with the use and density established for a property under an existing general plan or zoning ordinance for which the Town has already certified an EIR, additional environmental review is not required "except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." If such requirements are met, the examination of environmental effects is limited to those which the agency determines, in an Initial Study or other analysis:

- 1. Are peculiar to the project or the parcel on which the project would be located;
- 2. Were not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan with which the project is consistent;
- Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action; or
- 4. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

As set forth by Section 15183 of the CEQA Guidelines, the Town's General Plan EIR serves as a basis for the Modified Initial Study to determine if project-specific impacts would occur that are not adequately covered in the previously certified EIR.

This Modified Initial Study indicates whether the proposed project would result in a significant impact that: (1) is peculiar to the project or the project site; (2) was not identified as a significant effect in the General Plan EIR; or (3) are previously identified significant effects, which as a result of substantial new information that was not known at the time that the General Plan EIR was certified, are determined to have a more severe adverse impact than discussed in the General Plan EIR.

Regarding "peculiar" impacts, CEQA Guidelines Section 15183(f) states the following:

An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR.

D. 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 project site is an approximately 26.29-acre parcel identified by APN 045-161-033 and located at 5780 Rocklin Road in the Town of Loomis, CA (see Figure 1 and Figure 2).

Figure 1
Regional Vicinity Map

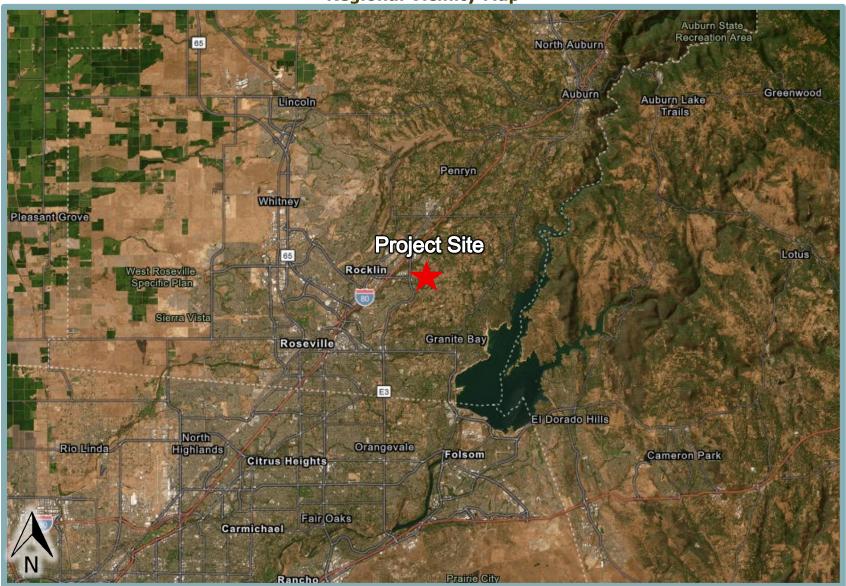


Figure 2
Project Site Boundaries



The project site is primarily comprised of undeveloped, lightly forested land with an approximately 4.6-acre pond occupying the southwestern portion of the site. Surrounding existing uses primarily include rural single-family residences, as well as a circular storage tank and a single-family home to the north, across Rocklin Road; a small strawberry field to the northeast; and a church located further northeast, across Rocklin Road. The Town of Loomis General Plan designates the site as RR and the site is zoned RR.

Project Components

The proposed project would include the subdivision of the project site into a total of 20 single-family residential lots, ranging from 40,000 square feet (sf) to 136,612 sf with an average lot size of 54,628 sf (see Figure 3 and Figure 4). Residential lots five to ten would include portions of the pond on the southwest portion of the project site. The existing single-family residence on the northern portion of the project site would be demolished for the development of residential lot 13. The proposed project would also include the development of a new roadway, Reserve Court, off of Barton Road, which is located along the eastern border of the project site. Site access would be provided by Reserve Court. Additional detail regarding the proposed project's parking, access, and circulation; landscaping; and utility infrastructure is provided below.

Parking, Access, and Circulation

As discussed above, site access would be provided through the proposed roadway, Reserve Court, off of Barton Road, located along the eastern border of the project site. The proposed roadway would include a 38-foot-wide right-of-way (ROW) comprised of two 12-foot-wide travel lanes, as well as a 7.2-foot-wide parking lane and five-foot-wide sidewalk along the northern and eastern sides of the roadway. The proposed project would include construction of a five-foot-wide sidewalk along the southernly half-section of Rocklin Road, and a five-foot-wide decomposed granite trail along the Barton Road project frontage. In addition, the proposed roadway would include curb and gutter improvements along both sides of the ROW, as well as 12.5- and 24-foot-wide public utility easements (PUEs) respectively located along the north and south sides of the ROW.

In addition to the on-street parking located along Reserve Court, each proposed residence would include garage parking and driveway space for future residents.

The proposed project would also include frontage improvements along Barton Road, as well as striping improvements along Rocklin Road (see Figure 5). The Barton Road frontage improvements would include the widening of the western half of the ROW to allow for the construction of a left turn lane and pavement markings to identify the proposed travel and turn lanes, stop bar, and future bicycle routes. The Rocklin Road striping improvements would include widening of the southernly half of the ROW to include a 40-foot-long "no parking" zone as well as space to stripe future bicycle routes.

Landscaping and Design Improvements

The proposed project would include six-foot-tall solid-wood fences along interior property lines. A six-foot-tall wrought iron fence atop an approximately 3-foot-tall berm would be installed along the Rocklin Road frontage on the northern boundary of the project site.

The proposed project would include a 12.5-foot-wide landscape corridor along the frontage of Rocklin Road, located between the proposed sidewalk and property line within the landscape berm. In addition, a landscape buffer would be located along the Barton Road frontage, between the roadway and proposed residences.

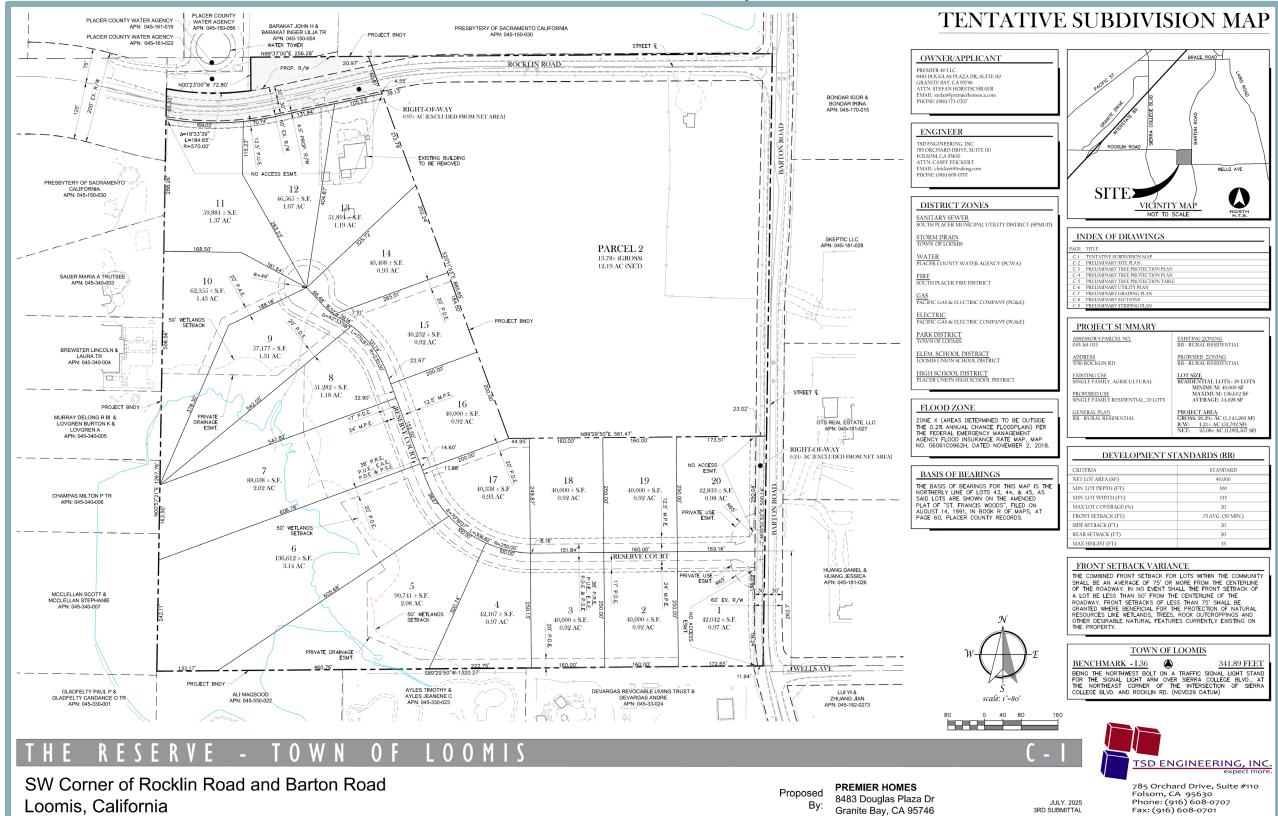


Figure 3
Tentative Subdivision Map

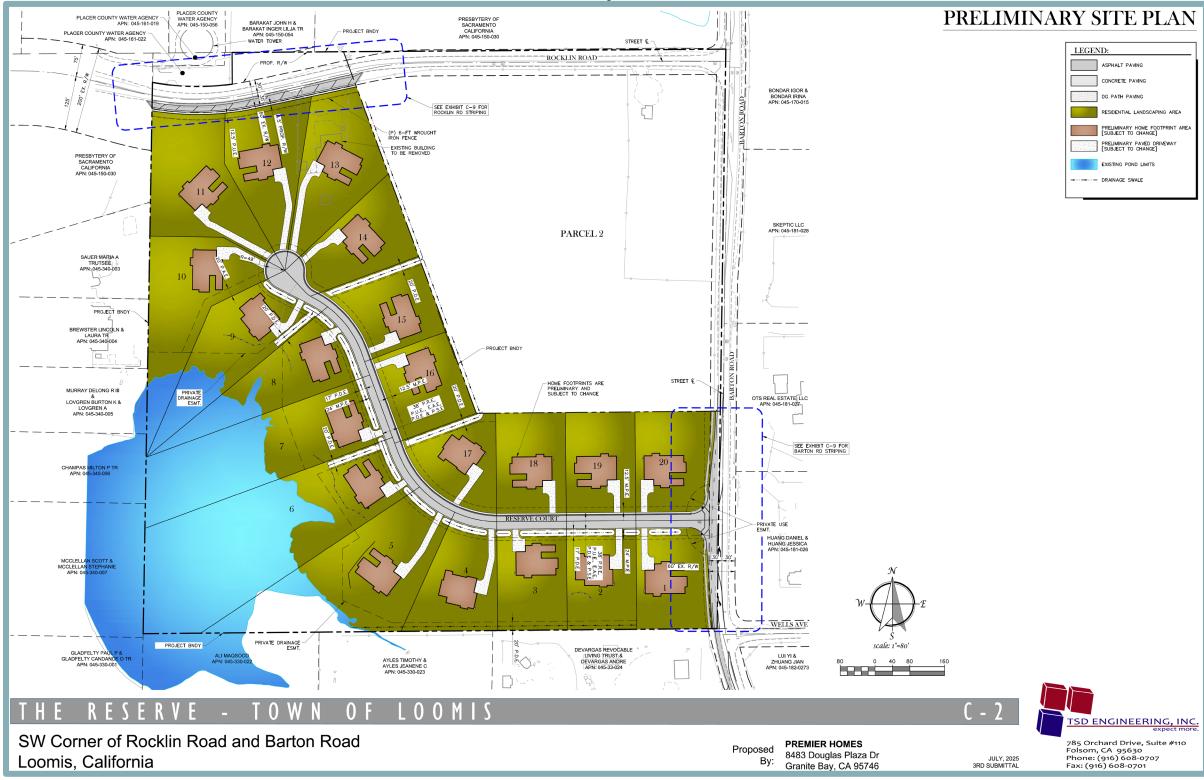
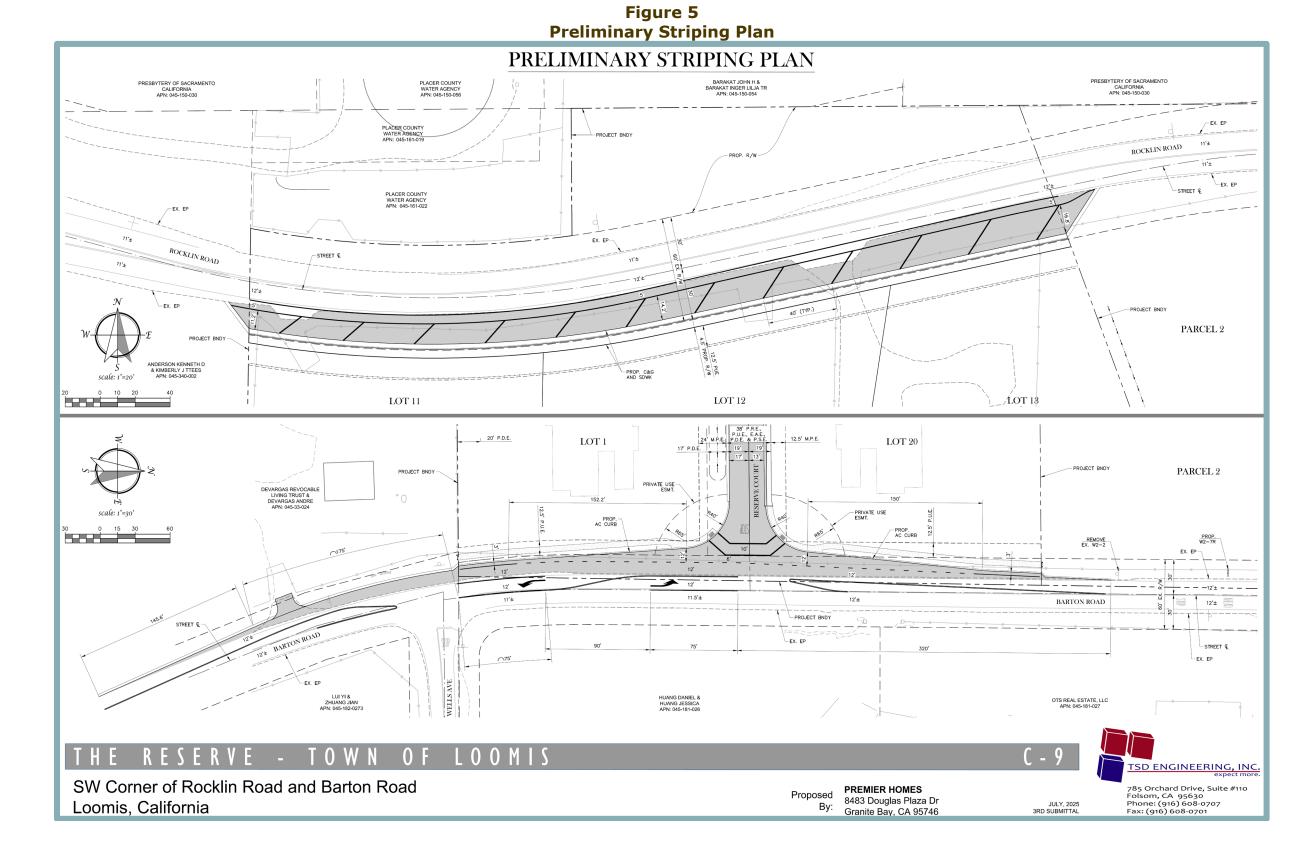


Figure 4
Preliminary Site Plan



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The landscape buffer would be 24- to 35-feet-wide and would include a five-foot-wide decomposed granite trail. Both the landscape corridor and landscape buffer would be planted with a mixture of street trees, shrubs, climbing plants, and ground covers. The proposed project would also include landscaped areas within the front yards of the proposed residential lots.

The proposed project would include an entry monument at the intersection of the proposed Reserve Court and Barton Road. The entry monument would include a semi-circular landscaped area comprised of mature plant material and landscaping lights.

All landscaping would comply with the Water Efficient Landscape Requirements contained in Chapter 13.34 of the Town of Loomis Municipal Code. In addition to landscaping improvements, the proposed project would include the removal of 279 on-site trees.

Utilities

Pacific Gas and Electric (PG&E) would provide electricity services to the project site through connections to existing infrastructure in the project vicinity. Utilities for the proposed project, including water service, sewer service, and stormwater infrastructure, are discussed in further detail below.

Water

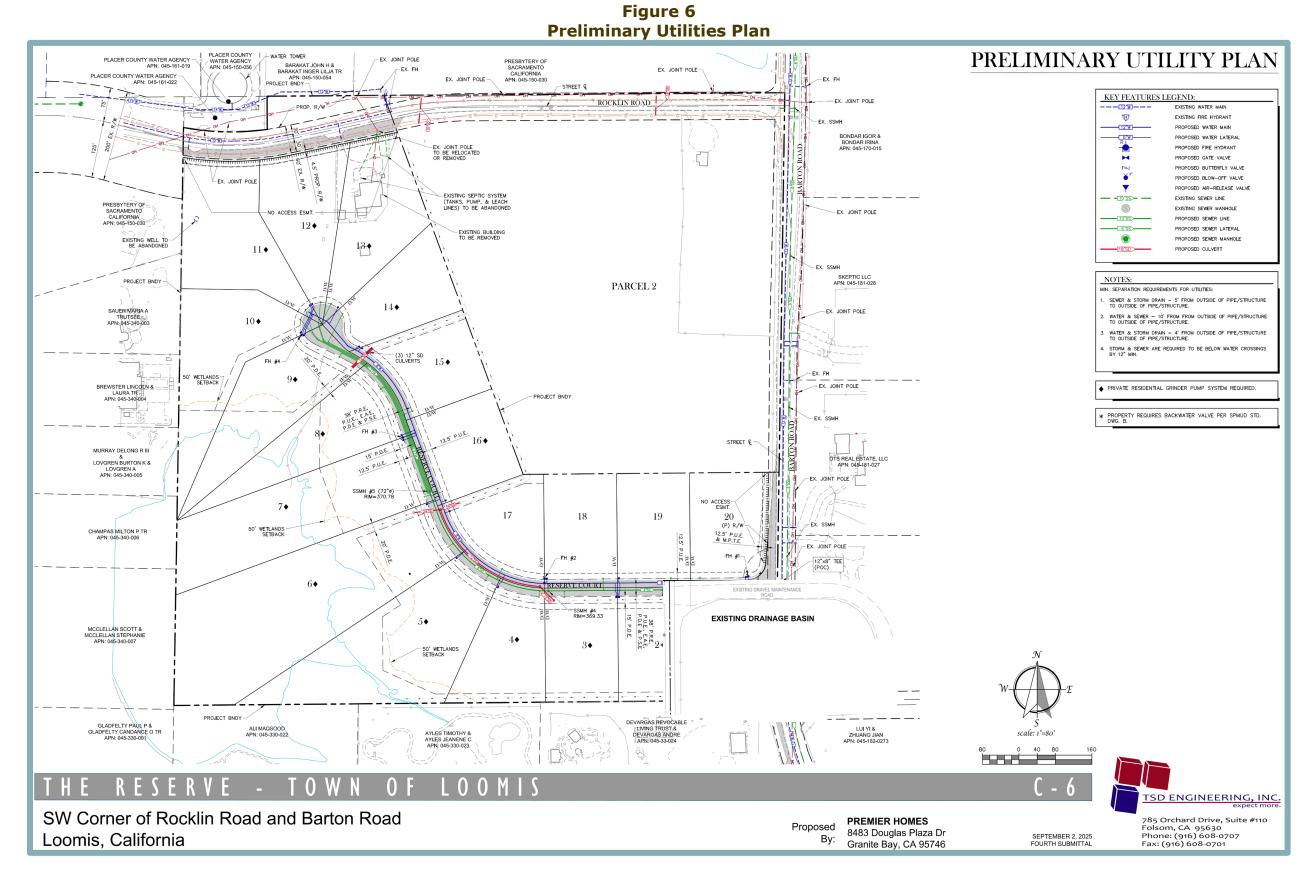
Treated water service for the proposed project would be provided by the Placer County Water Agency (PCWA), which serves the majority of Placer County, including the Town of Loomis. The proposed project would include installation of an eight-inch water line within the proposed roadway (see Figure 6). The proposed eight-inch water line would connect to the existing 12-inch water line located in Barton Road, east of the project site. The proposed eight-inch water line would provide residential water services to the proposed residences, as well as provide adequate fire flow for residential sprinkler systems and fire hydrants. New fire hydrants would be installed along the proposed internal roadway.

Wastewater

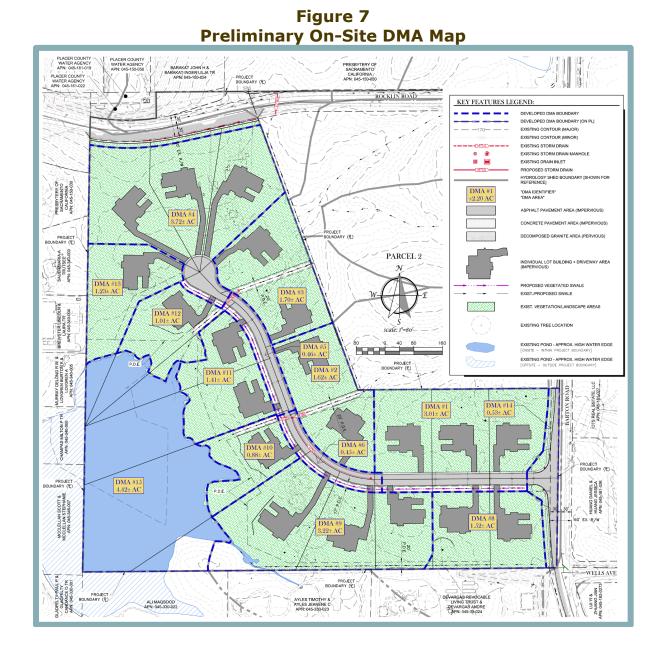
Wastewater treatment for the project area is currently provided by the South Placer Municipal Utility District (SPMUD). The proposed project would include installation of a six-inch gravity sewer line within the internal roadway, from lots seven and 16 to Barton Road, that would connect to existing six- and eight-inch sanitary sewer lines within Barton Road, east of the project site (see Figure 6). Lots 8 through 15 would use individual grinder pumps and 2.5-inch force mains to convey wastewater to the proposed six-inch gravity line at the termination manhole within the internal roadway.

Stormwater Drainage

The proposed project would include the division of the project site into several drainage subsheds, which would include 14 drainage management areas (DMAs), to capture and discharge flows into the pond located in the southwest portion of the site (see Figure 7). The proposed stormwater drainage system would consist of 24-inch and 12-inch storm drain lines which would connect to four water quality swales throughout the project site, to convey stormwater flows downgrade to the on-site pond. In addition, the proposed project would include natural and developed vegetated areas to treat and reduce runoff from on-site impervious surfaces.



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Demolition, Grading, and Construction Details

The project would also require demolition of all existing structures on-site and the removal of 279 on-site trees. Construction of the proposed project would include grading of an approximately 20-acre portion of the project site, as well as trenching for utility improvements. The remaining site acreage would remain undisturbed to preserve the on-site pond and buffer area around the pond.

Discretionary Actions

The proposed project would require Town approval of a Tentative Subdivision Map, as well as a Front Setback Variance. Each project approval is described in further detail below.

Tentative Subdivision Map

Pursuant to Section 14.20.020 of the Town of Loomis Municipal Code, a Tentative Subdivision Map is required for subdivision of five or more parcels. As previously discussed, the proposed project would require approval of a Tentative Subdivision Map to subdivide the project site into 20 single-family residential lots. The lots would range in size from 40,000 to 136,612 sf (see Figure 3). The Tentative Subdivision Map would be consistent with the existing General Plan land use and zoning designations for the project site.

Front Setback Variance

Pursuant to Section 13.30.110 of the Town of Loomis Municipal Code, all structures within the Town of Loomis are required to comply with the setback requirements associated with the applicable zoning district. The project site is zoned RR, which requires a minimum front setback of 50 feet. The proposed project would require approval of a setback variance as provided under Municipal Code Section 13.62.060 to reduce the setbacks required for the proposed single-family residences in order to preserve existing trees along the on-site pond.

E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

On the basis of the following initial evaluation, the Town has determined that the proposed project is consistent with the General Plan EIR. All project impacts have been determined to be less than significant, or can be mitigated to a less-than-significant level given required compliance with General Plan policies or mitigation measures included in the General Plan EIR.

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	Land Use and Planning	Mineral Resources
Quality		
Noise	Population and Housing	Public Services
Recreation	Transportation	Tribal Cultural Resources
Utilities and Service	Wildfire	Mandatory Findings of
Systems		Significance

Town of Loomis

F. **DETERMINATION** On the basis of this Modified Initial Study/15183 Checklist: I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. \Box 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. X 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. Christy Consolini November 25, 2025 Signature Date

For

Christy Consolini, Planning Director

Printed Name

G. ENVIRONMENTAL CHECKLIST

The following modified checklist is based on the environmental checklist form presented in Appendix G of the CEQA Guidelines. The modified 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:

Significant Impact Peculiar to the Project or Project Site: An impact that could be significant due to something peculiar to the proposed project or the project site that was not previously identified in the General Plan EIR. If any potentially significant peculiar impacts are identified, an additional CEQA document must be prepared to analyze such impacts.

Significant Impact due to New Information: Any impact that would be considered significant based on new information which was not known at the time the prior EIR was prepared. If any significant impacts are identified, an additional CEQA document must be prepared to analyze such impacts.

Impact Adequately Addressed in General Plan EIR: Impacts previously evaluated in the Town's General Plan EIR that would not change from what was evaluated previously. This designation applies in cases where implementation of the proposed project would not result in a new significant impact, a substantially increased significant impact, or a peculiar impact that was not analyzed in the General Plan EIR.

I.	AESTHETICS. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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. According to the General Plan EIR, the Town of Loomis does not contain any designated scenic vistas. In addition, according to the General Plan EIR, eligible or designated State scenic highways are not located within or in close proximity to the Planning Area, and the Planning Area is not visible from any designated or eligible State or locally designated scenic highway. As shown on California Scenic Highway Mapping System, the project site is located approximately 20.58 miles west of U.S. Route 50, which is the nearest officially designated State Scenic Highway to the project site.³ Therefore, the proposed project would not have the potential to damage scenic resources within a State scenic highway.

Based on the above, impacts related to a substantial adverse effect on a scenic vista and substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway, have been adequately addressed in the General Plan EIR and effects peculiar to the project or parcel on which the project would be located do not exist. Thus, the criteria for requiring further CEQA review are not met.

c. The General Plan EIR assessed the potential for implementation of development under the General Plan to substantially degrade the existing visual character or quality of the Town under Impact 4.1-1. As discussed therein, the General Plan includes policies and implementation measures intended to preserve visual resources and prevent the substantial degradation of views of existing scenic resources. The General Plan EIR concluded that, with adherence to the applicable policies and implementation measures, as well as adherence to the Town's Design Standards and Municipal Code requirements potential development under the General Plan would not result in substantial changes to important scenic resources or their visibility from visually sensitive locations. Therefore, the impact was determined to be less than significant.

California Department of Transportation. California Scenic Highway Mapping System. Available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa%20. Accessed November 2024.

The project site is primarily comprised of undeveloped, lightly forested land with an approximately 4.6-acre pond occupying the southwestern portion of the site. Surrounding existing uses generally include rural single-family residences. Other surrounding land uses include a circular storage tank and a single-family home to the north, across Rocklin Road, and a small strawberry field to the northeast. In addition, a church is located further northeast, across Rocklin Road. Pursuant to Appendix G of the CEQA Guidelines, because the project site is in a non-urbanized area, the relevant threshold is whether the proposed project would substantially degrade existing views from the project site.

The proposed project is consistent with the General Plan land use designation for the project site and would be required to comply with all applicable development standards required by the Town, including standards related to building height, lot area, setbacks, and building design, as well as all applicable General Plan policies, such as Policy LU-1.1.3, Policy LU-1.3.2, Policy LU-1.4.1, and Policy LU-1.4.2. In addition, the proposed project would be consistent with the surrounding existing rural residential development in the project area. Compliance with the aforementioned development standards and General Plan policies would ensure that the proposed project would not substantially degrade scenic views from the project site beyond what was previously analyzed in the General Plan EIR.

Based on the above, impacts related to the degradation of existing scenic views from the project site were adequately addressed in the General Plan EIR, and the project would not result in more severe impacts beyond what was identified in the General Plan EIR.

d. According to the General Plan EIR, buildout of the General Plan would result in new development that would add nighttime lighting and daytime glare. However, through compliance with proposed General Plan policies and implementation measures, and Loomis Municipal Code requirements the General Plan EIR concluded that new light or glare associated with buildout of the General Plan would not substantially affect day or nighttime views.

In addition, new development would be subject to applicable General Plan policies, including Policy LU-4.3.2, would ensure that the light associated with new development is compatible with and complimentary to surrounding development, such as by requiring new lighting be oriented away from sensitive used and shielded to the extent possible to minimize spillover light and glare.

As discussed above, the project site is currently comprised of undeveloped, lightly forested land with an approximately 4.6-acre pond occupying the southwestern portion of the site. An existing single-family residence is located on the northern border of the project site. Thus, limited existing sources of light and glare currently occur with the project site. In addition, the project site is surrounded by existing development, and light associated with the proposed residences would be consistent with what was anticipated for the site in the General Plan EIR. Lighting associated with the proposed project would be required to adhere to Section 13.30.080 of the Town's Municipal Code, which defines allowable heights and intensity for outdoor lighting and provides light design guidelines. For example, Section 13.30.080 states that lighting shall be energy efficient and shielded so that the light source is not visible from off-site, and that glare and reflections are confined to the maximum extent feasible within the boundaries of the site. In addition, the proposed project would be consistent with the site's land use and zoning designations, and thus, the project site has been anticipated for residential development by the Town.

Throughout construction of the proposed project, sources of light and glare would be increased as well. Construction activities at nighttime could include the use of lighting fixtures and vehicles producing light on the property. However, Section 13.30.070(C)(3) of the Municipal Code limits hours of construction to 7:00 AM and 7:00 PM, Monday through Friday, between the hours of 8:00 AM to 7:00 PM on Saturdays, and between the hours of 9:00 AM and 5:00 PM on Sundays and national holidays with explicit Town approval.

Based on the above, impacts related to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area were adequately addressed in the General Plan EIR and the proposed project would not result in any more severe impacts. Thus, the criteria for requiring further CEQA review are not met.

II.	AGRICULTURE AND FOREST RESOURCES. uld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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. As discussed on page 4.2-9 of the Town's General Plan EIR, the Loomis planning area contains 159 acres of Farmland of Statewide Importance and 59 acres of Unique Farmland, for a total of 218 acres of Farmland, according to the California Department of Conservation (DOC). The General Plan includes policies and implementation measures related to agricultural operations and adjacent uses, including Policy LUP-1.2.1, which allows property owners the "right-to-farm" their parcels through the protection and operation of agricultural land uses, and Policy LU-1.2.3, which requires buffers, zoning restrictions, and other design and regulatory measures to protect agricultural operations from encroachment by urban development. Compliance with the General Plan policies would ensure that future development under the General Plan would not affect agricultural operations or resources, and would not contribute to the conversion of Farmland outside of the Planning Area. Thus, the General Plan EIR concluded that impacts related to the conversion of Farmland to non-agricultural uses would be less-than-significant.

The DOC designates the project site as Grazing Land.⁴ Although the project site is not actively farmed, agriculture land use is allowed under the RR zoning designation. Nonetheless, the proposed project would be consistent with the RR land use designation and zoning, and the proposed single-family residences would be considered an allowable use. Therefore, 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. As such, the proposed project would not result in any peculiar effects related to such, and the criteria for requiring further CEQA review are not met.

b. As discussed on page 4.2-3 of the General Plan EIR, one parcel in the Town's Planning Area is under a Williamson Act contract. The General Plan does not propose land use

⁴ California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 2025.

designation changes, new policies, or new implementation measures that would cause a conflict with this Williamson Act contract. As such, the General Plan EIR concluded that buildout of the General Plan would not conflict with any such contracts. Thus, the issue was not addressed further. The project site is not subject to a Williamson Act contract. As such, the proposed project would not result in any peculiar effects, and the criteria for requiring further CEQA review are not met.

c,d. As discussed on page 4.2-9 of the General Plan EIR, the Town's Planning Area does not contain areas zoned as forestland or timberland, or a Timberland Production Zone. Although the project site is lightly forested, the 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 such, the proposed project would not result in any peculiar effects, and the criteria for requiring further CEQA review are not met.

	I. AIR QUALITY. buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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 Town of Loomis is located in the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter (PM_{2.5}) and the State particulate matter 10 microns in diameter (PM₁₀) standards, as well as for both the federal and State ozone standards. The federal Clean Air Act requires areas designated as federal nonattainment to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the federal ambient air quality standards (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. In compliance with regulations, the PCAPCD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal and State AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

The current applicable air quality plan for the project area is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan), updated July 24, 2017, and adopted by the California Air Resources Board (CARB) on November 16, 2017. The Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the Federal Clean Air Act requirements, including the federal AAQS.

It should be noted that in addition to strengthening the 8-hour ozone federal AAQS, the U.S. Environmental Protection Agency (USEPA) also strengthened the secondary 8-hour ozone federal AAQS, making the secondary standard identical to the primary standard. On October 26, 2015, the USEPA released a final implementation rule for the revised federal AAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). On April 30, 2018, the USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the portions of Placer County within the SVAB as nonattainment for the 2015 ozone standards. More specifically, Placer County is part of the Ozone Sacramento Federal Nonattainment Area (SFNA) which includes the Sacramento Metropolitan Air Quality Management District (SMAQMD), Feather River Air Quality Management District (FRAQMD), El Dorado Air Quality Management District

(EDAQMD), Yolo Solano Air Quality Management District (YSAQMD) and PCAPCD. The attainment deadline for the SFNA is July 2025.

General conformity requirements of the regional air quality plan include whether a project would cause or contribute to new violations of any AAQS, increase the frequency or severity of an existing violation of any AAQS, or delay timely attainment of any AAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the PCAPCD has adopted recommended thresholds of significance for emissions of PM $_{10}$ and the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO $_{\rm X}$). On October 13, 2016, the PCAPCD adopted updated significance thresholds for the aforementioned pollutants.

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD'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 1, 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 1 PCAPCD Thresholds of Significance (lbs/day)						
Pollutant Construction Threshold Operational Threshold						
ROG	82	55				
NOx	82	55				
PM ₁₀	82	82				
Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.						

As discussed under Impact 4.3-1 of the General Plan EIR, buildout of the General Plan would accommodate future growth in population, housing, commercial development, and jobs within the Town of Loomis, which would result in a cumulatively considerable net increase in NO_x in excess of the State and federal standards during construction. Thus, despite compliance with General Plan policies and PCAPCD rules and regulations, the General Plan EIR determined that the buildout of the General Plan would result in a potentially significant impact related to the generation of construction-related emissions of criteria pollutants. The General Plan EIR included Mitigation Measure 4.3-1a, a revision of General Plan Measure AQGHGE-1.1.2.1, which would require implementation of Best Management Practices (BMPs) and require air quality analysis during the development review process. In addition, the General Plan EIR included Mitigation Measure 4.3-1b which would incorporate additional emission control strategies for new developments that would exceed the PCAPCD threshold of significance related to construction. However, even with the implementation of Mitigation Measures 4.3-1a and 4.3-1b, the General Plan EIR noted that the exact buildout of the General Plan could not be determined and therefore buildout of the General Plan could result in construction-related emissions that could exceed the PCAPCD's significance threshold for NO_x. Therefore, the General Plan EIR concluded that the impact would be significant and unavoidable.

In addition, as discussed under Impact 4.3-2 of the General Plan EIR, buildout of the General Plan would include new development, such as buildings, structure, play areas, roadways, etc., which would result in the generation of criteria pollutants from operational activities within the Town of Loomis. As noted in the General Plan EIR, buildout of the

General Plan would result in a cumulatively considerable net increase in ROG and PM₁₀ in excess of the State and federal standards during operation. Thus, despite compliance with General Plan policies and PCAPCD rules and regulations, the General Plan EIR determined that the buildout of the General Plan would result in a potentially significant impact related to such. The General Plan EIR included Mitigation Measure 4-3.2, which would require new development to incorporate PCAPCD recommended mitigation measures to reduce operational emissions. However, even with the implementation of Mitigation Measure 4-3.2, the General Plan EIR determined that effectiveness and feasibility of the measures could not be quantified. Therefore, the General Plan EIR concluded that impacts related to operational criteria pollutants would remain significant and unavoidable.

Construction Emissions

During on-site demolition and the subsequent construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction worker commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate air pollutant emissions intermittently within the site and vicinity, until all construction has been completed, construction is a potential concern because the project is in a non-attainment area for ozone, PM₁₀, and PM_{2.5}.

As previously discussed, the General Plan EIR concluded that a significant and unavoidable impact would occur related to construction emissions generated by buildout of the General Plan. For those impacts determined to be significant in a General Plan EIR, CEQA Section 15183 allows for future environmental documents to limit examination of environmental effects to those impacts which were not already analyzed as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, criteria pollutant emissions associated with buildout of the site have been anticipated by the Town and analyzed in the General Plan EIR. Because associated impacts were previously determined to be significant and unavoidable, pursuant to CEQA Section 15183, further analysis of issues related to criteria pollutant emissions is not required in this Modified Initial Study.

Therefore, because the proposed project would be consistent with the land use and zoning designations for the project site, development on the project site was included in the General Plan EIR's projections. Additionally, the proposed project would be subject to the General Plan policies and mitigation measures discussed above. Therefore, impacts regarding construction-related emissions of criteria air pollutants and precursors were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

Operational Emissions

As previously discussed, the General Plan EIR concluded that a significant and unavoidable impact would occur related to operational criteria pollutant emissions generated by buildout of the General Plan. For those impacts determined to be significant in a General Plan EIR, CEQA Section 15183 allows for future environmental documents

to limit examination of environmental effects to those impacts which were not already analyzed as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, criteria pollutant emissions associated with buildout of the site have been anticipated by the Town and analyzed in the General Plan EIR. Because associated impacts were previously determined to be significant and unavoidable, pursuant to CEQA Section 15183, further analysis of issues related to criteria pollutant emissions is not required in this Modified Initial Study.

Additionally, according to PCAPCD, if a project is below the screening level identified for the applicable land use type, emissions from the operation of the project would have a less-than-significant impact on air quality. The screening criterion for operational emissions associated with single-family residences is 617 units.⁵ The proposed project involves the development of 20 single-family residences, which would be below the operational screening criteria for criteria pollutants. Therefore, based on the PCAPCD's screening criteria, the proposed project's operational emissions would not be expected to exceed PCAPCD thresholds of significance.

Based on above and consistent with the PCAPCD screening thresholds, operations of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and impacts related to such were adequately addressed in the Town's General Plan EIR.

Cumulative Emissions

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

To improve air quality and attain the health-based standards, reductions in emissions are necessary within nonattainment areas. The project is part of a pattern of urbanization occurring in the greater Sacramento ozone nonattainment area. The growth and combined vehicle usage, and business activity within the nonattainment area from the project, in combination with other past, present, and reasonably foreseeable projects within Placer County and surrounding areas, could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants.

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM₁₀ are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM₁₀ emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively

⁵ Placer County Air Pollution Control District. *PCAPCD CEQA Handbook*. December 2017.

considerable contribution to a significant cumulative impact. As a result, the PCACPD established operational phase cumulative-level emissions thresholds identical to the operational thresholds identified above, in Table 1.

As discussed above, based on the proposed project's consistency with the site's General Plan land use designation and PCAPCD's operational screening criteria, the proposed project would not result in construction and operation emissions that exceed the applicable thresholds of significance and, therefore, would result in less-than-significant impacts. As such, the proposed project would not be considered to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment and impacts related to such were adequately addressed in the Town's General Plan EIR.

Conclusion

Because the proposed project would be consistent with the site's General Plan land use designation and would be below the operational screening criteria, the project would not result in construction-related or operational emissions of criteria air pollutants in excess of the PCAPCD's thresholds of significance. Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, criteria pollutant emissions associated with buildout of the site have been anticipated by the Town and analyzed in the General Plan EIR. Therefore, conflicts with or obstruction of implementation of the applicable regional air quality plans would not occur.

Because associated impacts were previously determined to be significant and unavoidable, pursuant to CEQA Section 15183, further analysis of issues related to criteria pollutant emissions is not required in this Modified Initial Study. Additionally, the proposed project would comply with all applicable General Plan Mitigation Measures. Thus, impacts related to emissions of criteria pollutants and consistency with the applicable air quality plans were adequately addressed in the General Plan EIR, and pursuant to CEQA Guidelines Section 15183, the criteria for requiring further CEQA review are not met.

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 located approximately 100 feet from the project site's western boundary.

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

Localized CO Emissions

As discussed under Impact 4.4-3, buildout of the General Plan would result in an increase in CO emissions due to mobile emissions. However, implementation of applicable General Plan policies AQGHGE-1.1.2, AQGHGE-1.1.3, AQGHGE-1.1.6, and LU-4.1.1, would reduce potential impacts related to localized CO emissions to a less-than-significant level.

In addition, the General Plan EIR determined that the level of traffic on roadways in the Planning Area would not generate a quantity of CO emissions which would substantially contribute to CO hotspots. Therefore, the General Plan EIR concluded that the impact would be less than significant.

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 PCAPCD has established screening methodology for localized CO emissions, which are intended to provide a conservative indication of whether project-generated vehicle trips would result in the generation of localized CO emissions that would contribute to an exceedance of AAQS and potentially expose sensitive receptors to substantial CO concentrations. Per the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions and if either of the following scenarios are true, the project could result in localized CO emissions that would violate CO standards:

- Degrade the peak hour Level of Service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes an increase in delay at an intersection by 10 seconds or more when project-generated traffic is included.⁶

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

As discussed above, the proposed project would be well below the representative size identified by the PCAPCD for a single-family residential development for which operational emissions would exceed the applicable thresholds of significance. Accordingly, operational emissions would be expected to be below the applicable criteria air pollutant thresholds of significance. For the same reasons, the proposed project would not be expected to result in emissions of CO in excess of 550 lbs/day. Thus, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS or expose sensitive receptors to substantial concentrations of localized CO.

Based on the guidance of the PCAPCD, similar to the conclusions of the General Plan EIR, the proposed project would not be expected to result in substantial levels of localized

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⁶ Placer County Air Pollution Control District. CEQA Air Quality Handbook [pg. 37]. November 21, 2017.

CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

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. 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.

Impact 4.3-3 of the General Plan EIR concluded that buildout of the General Plan could expose sensitive receptors to construction-related TAC emissions as the location and duration of construction associated with General Plan buildout cannot be determined. Additionally, the General Plan EIR noted that buildout of the General Plan could expose sensitive receptors to operational emissions as the potential exists for stationary sources to be built at distances which could expose sensitive receptors to TACs. Therefore, the General Plan EIR concluded that impacts related to construction-related TAC emissions and operational TAC emissions would be potentially significant. Thus, the General Plan included Mitigation Measure 4.3.3a, a revision of General Plan Measure AQGHGE-1.2.1.2, which would require new development to implement CARB's guidance concerning land use compatibility and recommended setback distances, as well as incorporate mitigation strategies recommended by the PCAPCD. Implementation of Mitigation Measure 4.3.3b, a revision of General Plan Measure AQGHGE-1.2.1.4, would require the use of diesel-fueled equipment to incorporate strategies to reduce potential health risk consistent with the PCAPCD. However, even with the implementation of Mitigation Measures 4.3.3a and 4.3.3b, the General Plan EIR concluded that impacts related to the exposure of sensitive receptors to substantial TACs during construction and operation of the General Plan buildout would be significant and unavoidable.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy diesel truck traffic or idling. The proposed project would not involve long-term operation of any stationary diesel engine or other major onsite stationary source of TACs. Residential uses, such as the proposed project, do not typically involve long-term operation of any stationary sources of TACs. Therefore, the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions 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., 30 years or greater), construction activities associated with the proposed project would be significantly less. 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 by the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. Thus, on-site emissions of PM would be reduced, which would result in a proportional reduction in DPM emissions and exposure of nearby residences to DPM. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, including Rule 501 related to General Permit Requirements.

Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the limited duration of construction activities, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. Thus, the proposed project would not expose nearby sensitive receptors to substantial concentrations of TACs associated with construction emissions.

Criteria Pollutants

Exposure to criteria pollutants can result in adverse health effects. The applicable AAQS are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SVAB is designated as nonattainment for State and federal eight-hour ozone and State PM₁₀ standards, the PCAPCD, along with other air districts in the SVAB region, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SVAB are not exposed to excess concentrations of criteria pollutants. The PCAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS. Thus, if a project's criteria pollutant emissions exceed the PCAPCD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM₁₀ standards. However, ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO_X, as there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. For example, ozone concentrations depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds.

As discussed previously under Impact 4.3-1 and Impact 4.3-2 of the General Plan EIR, even with implementation of the applicable General Plan policies and Mitigation Measures

Placer County Air Pollution Control District. CEQA Air Quality Handbook [pg. 20]. November 21, 2017.

4.3-1a, 4.3-1b, and 4.3-2, construction and operational emissions associated with buildout of the General Plan would result in significant and unavoidable impacts. Nonetheless, the proposed project is below the PCAPCD's operational screening criteria and is consistent with the site's General Plan land use designation. Therefore, emissions associated with construction and operation of the proposed project have been generally anticipated and analyzed in the General Plan EIR.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO, TACs, or criteria pollutants during construction or operation. Therefore, the proposed project would not result in any peculiar effects, and further CEQA review would not be required.

d. 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 questions 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

As discussed under Impact 4.3-4 of the General Plan EIR, buildout of the General Plan would involve emission sources which would expose sensitive receptors to objectionable odors, and therefore could result in a potentially significant impact. However, the General Plan EIR concluded that with compliance with PCAPCD Rules 205, 217, and 218, General Plan buildout would not result in substantial odors related to construction. Additionally, with implementation of applicable General Plan policies and Mitigation Measure 4.3.4, a revision of General Plan Measure AQGHGE-1.2.1.5, which would require buffering of new commercial and industrial land uses to prevent siting residential uses near odor sources, the General Plan EIR concluded that General Plan buildout would result in a less-than-significant impact related to odors during operation.

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. 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 analysis to determine the presence of a significant odor impact is difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants (WWTPs), landfills, and composting facilities. 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, operation of construction equipment would be regulated by PCAPCD rules and regulations, restricted to the hours of 7:00 AM to 7:00 PM Monday through Friday, 8:00 AM to 7:00 PM Saturday, and 9:00 AM to 5:00 PM Sunday and Holidays, pursuant to Loomis Municipal Code Section 13.30.070. 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. 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.

PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, including odors, and provides enforcement of odor control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. While the training components would involve live fire trainings during operation, the infrequent nature of these trainings and PCAPCD permit requirements would reduce the likelihood that the proposed project would result in any odor complaints. Thus, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, the PCAPCD would be required (per PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary. Thus, although not anticipated, if odor complaints are made after the proposed project is approved, the PCAPCD would ensure that such odors are addressed and any potential odor effects reduced to less than significant. Accordingly, substantial objectionable odors would not occur during construction activities or affect a substantial number of people.

Dust

The General Plan EIR does not specifically evaluate the potential for buildout to result in the emission of dust that adversely affects a substantial number of people. However, the General Plan EIR does include PCAPCD Rule 228 as an applicable regulation that would control emissions of fugitive dust. In addition, General Plan EIR Mitigation Measures 4.3-1a and 4.3-1b include measures that would further result in dust control during construction associated with General Plan buildout.

Construction of projects within Placer County are required to comply with all applicable PCAPCD rules and regulations. The aforementioned rules would act to reduce construction-related dust by implementing dust control measures. PCAPCD Rule 228 requires implementation of dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

Based on the above, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people. Furthermore, given that the proposed project is consistent with the site's General Plan land use designation, emissions associated with construction and operation of the proposed project have been generally anticipated and analyzed in the General Plan EIR. Therefore, the proposed project would not result in any peculiar effects, and further CEQA review would not be required for this topic.

IV	buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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,f. The following discussion is based primarily on the findings of a Biological Resources Assessment (BRA) prepared for the proposed project by Madrone Ecological Consulting (Madrone) (see Appendix A).⁸

The General Plan EIR concluded that applicable federal, State, regional, and local regulations, together with the policies, implementation measures, and mitigation measures included in the General Plan and General Plan EIR would reduce potential impacts to special-status plant and wildlife species that could result from buildout of the General Plan to a less-than-significant level. Applicable federal and State regulations include, but are not limited to, the Clean Water Act (CWA), Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), California Endangered Species Act (CESA), and California Fish and Game Code (CFGC). Local regulations related to biological resources include Policy BIO-1.1.1, which requires the Town to encourage the preservation of vegetation communities that provide habitat for sensitive plant and wildlife species; Policy BIO-1.2.1 related to minimizing impacts to streams and associated riparian habitats; and Policy BIO-1.3.1, which requires preservation of native riparian and aquatic resource areas as open space to the maximum extent feasible. In addition, the General Plan EIR included Mitigation Measure 4.4-1, which would require that project within the planning area identify sensitive plant and wildlife species that may occur on a project site through the preparation of a Biotic Resources Evaluation. The BRA prepared for the

⁸ Madrone Ecological Consulting. *Biological Resources Assessment, The Reserve, Town of Loomis, Placer County, California*. September 2025.

project site identifies special-status species that may occur on the project site, consistent with Mitigation Measure 4.4-1 of the General Plan EIR.

Special-status species include those species that are:

- Listed as endangered or threatened under the FESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the CESA (or proposed for listing);
- Designated as endangered or rare, pursuant to CFGC (Section 1901);
- Designated as fully-protected, pursuant to CFGC (Section 3511, Section 4700, or Section 5050);
- Designated as species of special concern by the California Department of Fish and Wildlife (CDFW); or
- Defined as rare or endangered under CEQA (California Rare Plant Rank [CRPR] 1, 2, and 3).

Although CDFW Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. In addition to regulations for special status species, most birds in the U.S., including non-status species, are protected by the MBTA of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal.

According to the BRA, the project site consists of three terrestrial vegetation communities, which include rural residential developed, annual brome grassland, and mixed oak forest and woodland (see Figure 8) The on-site rural residential developed land includes one single-family residence and portions of Rocklin Road and Barton Road which comprise and total area of 1.4 acres. The on-site annual brome grassland is comprised of non-native ruderal species, including soft chess (Bromus hordeaceus), ripgut grass (Bromus diandrus), yellow star-thistle (Centaurea solstitialis), bristly dogtail grass (Cynosurus echinatus), Bermuda grass (Cynodon dactylon), prickly lettuce (Lactuca serriola), winter vetch (Vicia villosa), smooth cat's-ear (Hypochaeris glabra), (Erodium botrys), elegant clarkia (Clarkia unquiculata), hairy hawkbit (Leontodon saxatilis), slender wild oat (Avena barbata), ryegrass (Festuca perennis), rose clover (Trifolium hirtum), and goose grass (Galium aparine). The remaining non-aquatic portions of the project site include mixed oak forest and woodland. The overstory of the community is dominated by interior live oak (Quercus wislizeni), blue oak (Quercus douglasii), and grey pine (Pinus sabiniana). A number of shrubs and other perennials occur in the understory, including western poison oak (Toxicodendron diversilobum), California coffee berry (Frangula californica), Armenian blackberry (Rubus armeniacus), chaparral honeysuckle (Lonicera interrupta), and bindweed (Convolvulus arvensis). The herbaceous understory is largely similar to the disturbed annual brome grassland described above.

A protocol-level aquatic resources delineation conducted for the proposed project identified 5.06 acres of aquatic resources within the project site (see Table 2). Madrone identified seasonal wetlands, seasonal wetland swales, seep, and pond habitats within the project site. Plant species commonly observed in seasonal wetlands within the project site include rye grass (*Festuca perennis*), green dock (*Rumex conglomeratus*), iris-leaved rush (*Juncus xiphioides*), Baltic rush (*Juncus balticus*), and Mediterranean barley (*Hordeum marinum*). Dominant plant species within the seasonal wetland swales include rye grass, annual rabbitfoot grass (*Polypogon monspeliensis*), common velvet grass (*Holcus lanatus*), and green dock.

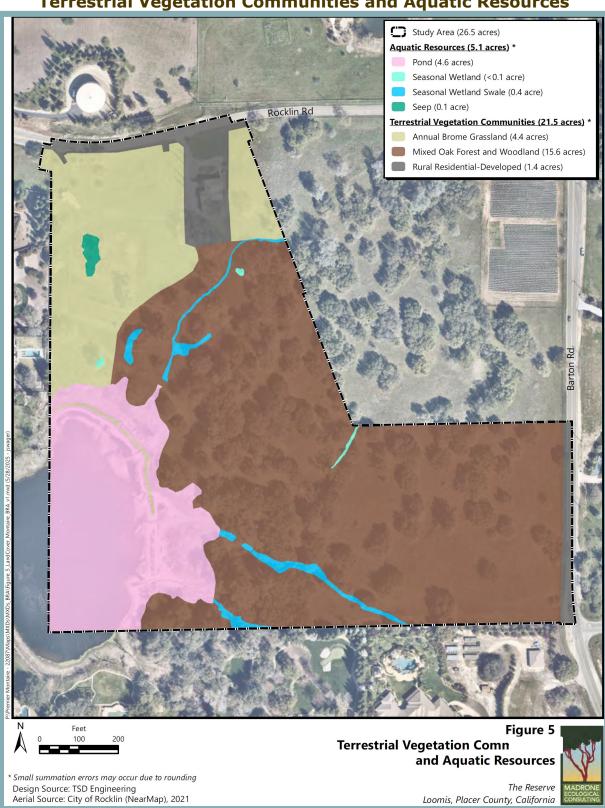


Figure 8
Terrestrial Vegetation Communities and Aquatic Resources

Other species commonly observed in these features within the project site include western goldenrod (*Euthamia occidentalis*), tall nutsedge (*Cyperus eragrostis*), cattail (Typha sp.), Italian thistle (*Carduus pycnocephalus*), and Armenian blackberry.

Dominant plant species in the seep within the project site includes a Goodding's black willow (*Salix gooddingii*), iris-leaved rush, Baltic rush, common velvet grass, and Armenian blackberry. Wetlands adjacent to the pond were differentiated from seasonal wetlands and seasonal wetland swales that drain directly into the pond. Such wetlands include willows (Salix spp.), Fremont cottonwood (*Populus fremontii*), soft rush (*Juncus effusus*), swamp prickle grass (*Crypsis schoenoides*), rabbitfoot grass, water primrose (*Ludwigia peploides*), northern water plantain (*Alisma triviale*), brome fescue (*Festuca bromoides*), tall nutsedge, willow herb (*Epilobium densiflorum*), slender willow herb (*Epilobium ciliatum*), western goldenrod, cattail, and Armenian blackberry. Seasonally, the open water portion of the pond is covered with mosquito fern (*Azolla filiculoides*) and duckweed (*Lemna sp.*).

Table 2 Aquatic Resources Mapped Within the Project Site				
Aquatic Resource Type Acreage				
Seasonal Wetland	0.03			
Seasonal Wetland Swale	0.35			
Seep	0.08			
Subtotal 0.46				
Pond	4.60			
Total	5.06			
Source: Madrone Ecological Consulting, May 2025. (see Appendix A)				

In order to ascertain the potential for any special-status species to occur on the project site, a records search review of special-status species within the vicinity of the project site was conducted as part of the BRA. Madrone also conducted field surveys of the project site on August 23, and October 7, 2022, May 2, and June 27, 2023, March 18, 2025. The potential for special-status species to occur on the project site is discussed in further detail 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. The General Plan determined that eight special-status plants have the potential to occur in the Town of Loomis. The species include big-scale balsamroot, legenere, red bluff dwarf bush, Ahart's dwarf bush, dwarf downinigia, red hills soaproot, Sanford's arrowhead, and Brazillian watermeal. As discussed under Impact 4.4-1 of the General Plan EIR, site disturbance associated with buildout of the General Plan could result in direct removal of special-status plant species. Additionally, the General Plan EIR determined existing special-status plant species habitat could be degraded by habitat fragmentation and alteration.

The General Plan EIR concluded that compliance with General Plan Policy BIO-1.1.1, as well as Mitigation Measure 4.4-1 would require appropriate information gathering regarding potentially affected special-status species and effective mitigation in the context

of proposed development projects. Thus, the General Plan EIR concluded that impacts to special-status plant species would be less than significant.

A Special-Status Plant Survey Report (SSPSR) was prepared for the proposed project in July 2023, following the field surveys conducted on May 2, and June 27, 2023. The results of the SSPRS were incorporated into the BRA prepared for the proposed project. The SSPRS identified nine special-status plant species with the potential to occur within the project site, including the following: big-scale balsamroot; dwarf downingia; Boggs Lake hedge-hyssop; woolly rose-mallow; Ahart's dwarf rush; legenere; pincushion navarretia; Sanford's arrowhead; and common viburnum. However, while the project site presents suitable or marginally suitable habitat for a number of special-status plant species, special-status plant species were not observed during the 2023 protocol-level special status plant surveys of the project site. Therefore, the BRA concluded that impacts to special-status plant species are not anticipated for the proposed project.

Based on the above, special-status plant species are not anticipated to occur within the project site, and the proposed project would not be anticipated to result in impacts to special-status plant species.

Special-Status Wildlife

The General Plan identified 36 special-status wildlife species with the potential to occur in habitat within the planning area, including special-status invertebrates, fish species, reptiles, amphibians, bird species, and mammals. Such species include, but are not limited to, the vernal pool fairy shrimp, vernal pool tadpole shrimp, valley elderberry longhorn beetle (VELB), Chinook salmon, Central Valley steelhead, western spadefoot, California red-legged frog, northwestern pond turtle, tricolored blackbird, burrowing owl, loggerhead shrike, northern harrier, Swainson's hawk, white-tailed kite, song sparrow, pallid bat, and American badger. It should be noted that since the General Plan EIR was prepared, the status of burrowing owl has changed from a California State Species of Concern to a candidate for listing under the CESA, which affords the same protection as an endangered or threatened species under CESA. Under Impact 4.4-1, the General Plan EIR concluded that potential impacts to special-status wildlife species would be less than significant with implementation of all applicable General Plan policies and compliance with existing State and federal regulations, as well as implementation of General Plan EIR Mitigation Measure 4.4-1.

According to the CNDDB results summarized within Table 1 of the BRA, 53 special-status wildlife species have previously been documented within the region. Of the 53 special-status wildlife species, the BRA concluded that 36 of the species would not have the potential to occur on-site due to the lack of suitable habitat. For example, due to the nature of the on-site aquatic habitats, potential impacts as a result of the proposed project would not occur to special-status fish species, vernal pool tadpole shrimp, osprey, or American white pelican. In addition, the project site lacks prominent rock features and cliffs necessary to support black swift, prairie falcon, Townsend's big-eared bat, or spotted bat. The project site also does not contain the habitat necessary for the VELB. Furthermore, according to the BRA, the project site lacks the necessary riparian and marsh habitat to support yellow-breasted chat, California black rail, and yellow-headed blackbird, as well as lacking suitable habitat to support purple martin or bank swallow. Nonetheless, the BRA determined that habitat for roosting bats, migratory birds and raptors, Crotch's bumble bee, vernal pool fairy shrimp, monarch butterfly, western spadefoot, and northwestern pond turtle is present within the project site. However, potential impacts to migratory birds

and raptors, vernal pool fairy shrimp, western spadefoot, and northwestern pond turtle were previously addressed in the General Plan ER and were determined to be less than significant with implementation of all applicable General Plan policies and compliance with existing State and federal regulations as well as implementation of General Plan Mitigation Measure 4.4-1. Thus, the following analysis is focused on potential impacts to additional special-status wildlife species beyond those identified in the General Plan EIR, which include Crotch's bumble bee, monarch butterfly, and roosting bats, as discussed in further detail below.

Crotch's Bumblebee

Crotch's bumble bee is not federally listed but is a candidate for listing under CESA. Crotch's bumble bee has a limited distribution in southwestern North America, occurring primarily in California, including the Mediterranean region, Pacific Coast, West Desert, Great Valley, and adjacent foothills through most of southwestern California. Crotch's bumble bee inhabits open grassland and scrub habitats and is known to visit a wide variety of flowering plants. Plant families most commonly associated with Crotch's bumble bee include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. Crotch's bumble bee nests underground, often in abandoned rodent dens, and may overwinter in soft, disturbed soils or under leaf litter or other debris. Crotch's bumble bee has not been documented by CNDDB occurrences within five miles of the project site. However, the annual brome grasslands within the project site present marginally suitable habitat for Crotch's bumble bee.

Given that the species has the potential to occur on-site, the proposed project has the potential to result in impacts to the species if Crotch's bumble bee is present on-site during construction activities. However, compliance with the condition of approval (COA), which, as discussed below, would require implementation of all recommendations included in the BRA prepared for the proposed project, consistent with Mitigation Measure 4.4-1 of the General Plan EIR, and would ensure that impacts to Crotch's bumble bee would not occur as a result of the proposed project.

Monarch Butterfly

The monarch butterfly is proposed for listing as threatened under FESA. The monarch butterfly is a large conspicuous species of butterfly that occurs in North, Central, and South America; Australia; New Zealand; islands of the Pacific and Caribbean. The species can occur in fields, roadside areas, open areas, wet areas or urban gardens and requires flowering plants as a food source and healthy and abundant milkweed (generally Asclepius spp.) for laying eggs on as larval host plants. In California, monarch butterflies both continue to occupy and breed in areas near their overwintering sites throughout the year, as well as disperse over multiple generations to occupy and breed throughout the state in the spring through fall. Migratory monarch butterflies in western North America tend to occur more frequently near water sources such as rivers, creeks, roadside ditches, and irrigated gardens. A query of the Western Monarch Milkweed Database yielded one observation of a foraging adult in 2021 approximately 2.8 miles northeast of the project site, a second observation of a foraging adult in 1965 approximately 2.7 miles southeast of the project site, a third observation of a foraging adult in 2024 approximately 3.4 miles southeast of the project site, and one observation of breeding larvae in 2022 approximately 4.5 miles southwest of the project site. In addition, a query of iNaturalist found four research grade observations of monarch butterfly within 0.8 miles of the project site from 2022 to 2023.

While monarch butterflies were not observed during surveys of the project site, one large patch of narrowleaf milkweed was documented within the project site. The narrow leaf milkweed plants within the project site provide suitable breeding habitat for monarch butterfly eggs and larvae. Additionally, flowering plants within the project site may provide nectar for foraging adults.

Given that the species has the potential to occur, and forage on-site, the proposed project has the potential to result in impacts to the species if the on-site narrow leaf milkweed plants are removed during construction activities. However, compliance with the COA, which, as discussed below, would require implementation of all recommendations included in the BRA prepared for the proposed project, consistent with Mitigation Measure 4.4-1 of the General Plan EIR, and would ensure that impacts to monarch butterfly would not occur as a result of the proposed project.

Roosting Bats

Seven special-status bat species, including pallid bat, western mastiff bat, western red bat, hoary bat, western small-footed myotis, long-eared myotis, and fringed myotis have the potential to occur within the project site. The existing trees and structures within the project site represent suitable roosting habitat for pallid bat, western red bat, hoary bat, western small-footed myotis, long-eared myotis, and fringed myotis. Suitable roosting habitat for western mastiff bat is not present within the project site; however, the project site provides suitable foraging habitat for the species. The aforementioned bat species have not been documented by CNDDB occurrences located within five miles of the project site.

Given that the species have the potential to occur, feed, and forage on-site, the proposed project has the potential to result in impacts to the species if special-status bats are roosting within the on-site trees or buildings during construction activities. However, compliance with the COA, which, as discussed below, would require implementation of all recommendations included in the BRA prepared for the proposed project, consistent with Mitigation Measure 4.4-1 of the General Plan EIR, and would ensure that impacts to roosting bat species would not occur as a result of the proposed project.

General Plan Requirements

Pursuant to General Plan EIR Mitigation Measure 4.4-1, a Biotic Resources Evaluation is required to be prepared by a qualified biologist for any project that may have sensitive plant or wildlife species on-site. In addition, where impacts to special-status plant and wildlife species or their habitat cannot be avoided, the project proponent shall be required to mitigate all adverse effects to special-status species in accordance with guidance from the appropriate State or federal agencies. As discussed above, a BRA was prepared for the proposed project, which includes recommendations to ensure impacts to special-status species do not occur. Thus, in order to ensure that impacts related to special-status species would not occur, consistent with General Plan EIR Mitigation Measure 4.4-1, the Town of Loomis would require the following COA for the proposed project to ensure all recommendations included in the BRA are implemented as part of the proposed project:

In compliance with General Plan EIR Mitigation Measure 4.4-1, all recommendations included in the September 12, 2025 Biological Resources Assessment prepared by Madrone Ecological Consulting, LLC for the proposed project shall be implemented by the project applicant prior to any ground-disturbing activities. The results of all recommended pre-construction surveys shall be

submitted to the Town of Loomis Planning Department. All recommended avoidance measures shall be noted on project improvement plans, subject to review and approval by the Community Development Director.

Conclusion

Pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" The General Plan EIR concluded that applicable federal, State, regional, and local regulations, together with General Plan policies, implementation measures, and General Plan EIR mitigation measures would reduce potential impacts to special-status species that could result from buildout of the General Plan.

Based on the above, impacts to species identified as special-status species in local or regional plans, policies, or regulations, or by the CDFW or the U.S. Fish and Wildlife Service (USFWS), were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects given required compliance with applicable federal, State, regional, and local regulations, together with the policies and implementation measures included in the General Plan, which the General Plan EIR found would substantially mitigate potential environmental effects. The proposed project would not require further CEQA review related to effects on any special-status plant and wildlife species.

- b. As discussed under Impact 4.4-2 of the General Plan EIR, compliance with General Plan policies, implementation measures, and General Plan EIR mitigation measures would ensure that General Plan buildout would have a less-than-significant impact related to the loss or modification of riparian habitat. According to the General Plan, riparian communities are common along streams, ponds, and swales within the planning area, most notably along Secret Ravine and Antelope Creek. The project site is located approximately 1.25 miles east of Secret Ravine and 2.50 miles southeast of Antelope Creek and does not include riparian habitat on-site. Therefore, the proposed project would not result in adverse impacts upon sensitive natural communities, and impacts related to having a substantial adverse effect on riparian habitat or sensitive natural communities were adequately addressed in the General Plan EIR. The proposed project would not result in any peculiar effects that would require further CEQA review related to effects on any riparian habitat other sensitive natural communities.
- c. The USACE regulates the filling or grading of waters of the U.S. under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by "ordinary high-water marks" on opposing channel banks. All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE. In addition, under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board (SWRCB) has regulatory authority to protect the water quality of all surface water and groundwater in the State of California ("waters of the State"). Nine Regional Water Quality Control Boards (RWQCBs) oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders. Discharges into waters of the State that are also waters of the

U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all waters of the State, even those that are not also waters of the U.S., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB.

As discussed under Impact 4.4-3 of the General Plan EIR, buildout of the General Plan could potentially result in the dredge, fill, or hydrologic interruption of State or federally protected aquatic resources within the Town of Loomis. However, implementation of the applicable General Plan Policy BIO-1.3.1 and Implementation Measures BIO-1.3.1.1 to 1.3.1.4, in concordance with existing federal and State protections for aquatic resources would ensure that General Plan buildout would have a less-than-significant impact related to the loss or modification of jurisdictional waters of the U.S. and wetlands.

According to the BRA, approximately 5.06 acres of aquatic resources are present within the project site, including 0.03 acres of seasonal wetland, 0.35 acres of seasonal wetland swale, 0.08 acres seep, and 4.6 acres of pond (see Table 2 above). Development of the proposed project would result in direct impacts to 0.38 acres of aquatic resources, including 0.03 aces of seasonal wetland, 0.27 acres seasonal wetland swale, and 0.08 acres of seep. The remaining 4.68 acres of aquatic resources would be avoided and incorporated into the proposed open space areas (see Figure 9).

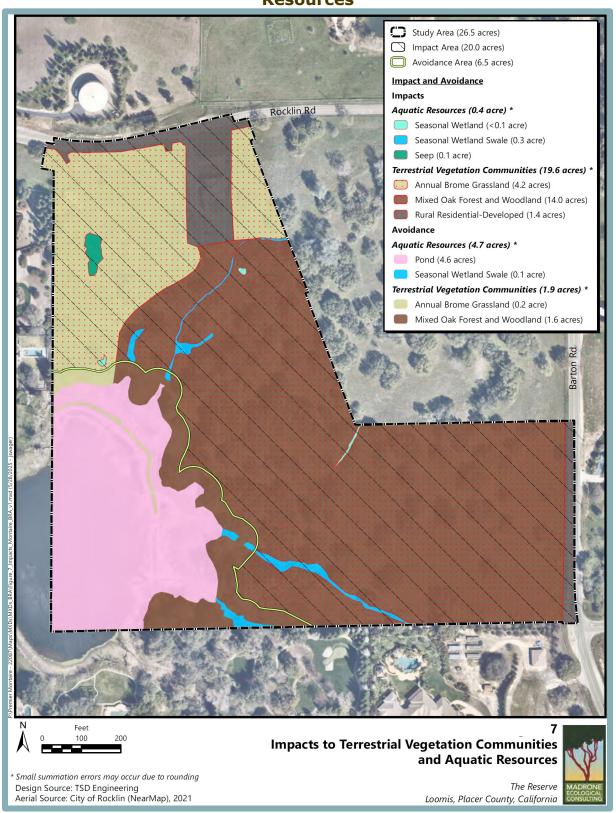
Given that the proposed project would directly impact 0.38 acres of aquatic resources, the proposed project has the potential to result in impacts to jurisdictional waters of the U.S. and wetlands. However, compliance with the COA, which, as discussed below, would require implementation of all recommendations included in the BRA prepared for the proposed project, consistent with Implementation Measure BIO-1.3.1.1 of the General Plan EIR, and would ensure that impacts to State or federally protected wetlands would not occur as a result of the proposed project.

General Plan Requirements

Pursuant to General Plan Implementation Measure BIO-1.3.1.1, the environmental review for development proposed on sites with aquatic resources shall include the preparation of an aquatic resources delineation and the formulation of appropriate mitigation measures to address project-related impacts to regulated aquatic resources. The BRA prepared for the proposed project included an aquatic resources delineation, and recommendations were identified by Madrone to ensure that impacts related to State or federally protected wetlands would not occur, consistent with General Plan Implementation Measure BIO-1.3.1.1. The Town of Loomis would require the following COA for the proposed project to ensure all recommendations included in the BRA are implemented as part of the proposed project:

In compliance with General Plan Implementation Measure BIO-1.3.1.1, all recommendations included in the September 12, 2025 Biological Resources Assessment prepared by Madrone Ecological Consulting, LLC for the proposed project shall be implemented by the project applicant prior to any ground-disturbing activities. The project applicant shall apply for all applicable State and federal permits. Proof of compliance with such permits shall be submitted to the Town of Loomis Planning Department.

Figure 9
Impacts to Terrestrial Vegetation Communities and Aquatic Resources



Conclusion

Pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" The General Plan EIR concluded that applicable federal, State, regional, and local regulations, together with General Plan policies, implementation measures and General Plan EIR mitigation measures would reduce potential impacts to State and federally protected aquatic resources that could result from buildout of the General Plan.

Based on the above, impacts to State or federally protected aquatic resources within the Town of Loomis, were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects given required compliance with applicable federal, State, regional, and local regulations, together with the policies and implementation measures included in the General Plan, which the General Plan EIR found would substantially mitigate potential environmental effects. The proposed project would not require further CEQA review related to effects on any State or federally protected aquatic resources or wetlands.

d. Under Impact 4.4-4, the General Plan EIR determined that existing riparian corridors within the Town of Loomis represent potential wildlife movement corridors. However, as previously discussed, the project site is located approximately 1.25 miles from the Secret Ravine and riparian habitat is not present on-site. In addition, the project site is surrounded by existing rural residential development to the north, south, east, and west, which would provide a significant barrier to dispersal of native wildlife travelling to and from the site. Most current animal movements on the project site would likely be local movements within the site and its immediate vicinity rather than regional movements. Additionally, given that the proposed project is consistent with the Town's General Plan land use designation for the project site, impacts related to migratory corridors associated with buildout of the site have been anticipated by the Town.

Based on the above, impacts related to interfering 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 were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

e. As discussed under Impact 4.4-5 of the General Plan EIR, compliance with the General Plan policies, implementation measures, and mitigation measures, and the existing Town of Loomis Tree Conservation Ordinance would ensure that General Plan buildout would not conflict with any existing policies or ordinances protecting biological resources, and no impact would occur.

Chapter 13.54 of the Town's Municipal Code establishes guidelines for tree management and preservation within the Town. Pursuant to Section 13.54.030, a protected tree includes the following:

- Any native oak tree with a trunk at least six inches in diameter as measured at breast height (DBH) for Interior Live Oak, Valley Oak, and Oracle Oak and four inches DBH for Blue Oak;
- Any oak tree with multiple trunks that have an aggregate DBH of at least 10 inches;
- Any tree identified as a heritage tree by the Town's Council;
- Any trees preserved or replanted pursuant to Section 13.54.090, except for exempt trees and those classified as invasive species by the California Invasive Pest Council, Cal-IPC (cal.ipc.org) and non-native trees listed as not to be planted on Town-owned property in the Master Tree List.

When circumstances do not allow for retention of trees, permits are required to remove Town trees or private protected trees that are within the Town's jurisdiction. In addition, Municipal Code Section 13.54.070, states that it shall be unlawful to perform any act within the critical root zone of a protected tree or that interferes with or results in the unnatural death of a protected tree without a tree permit. The Tree Permit application requires a statement detailing the purpose of the proposed work, the location, size, and species of the trees affected, and a written evaluation of health and status of affected trees.

According to the Preliminary Arborist Report and Tree Inventory prepared by California Tree and Landscaping Consulting Inc. (CalTLC) for the proposed project, the project site supports 496 trees, of which 492 are considered protected trees.9 As discussed in the BRA, of the 492 on-site protected trees, 297 were rated as dying or unhealthy, and would not require mitigation under the Town of Loomis Tree Ordinance. Of the remaining 195 on-site protected trees, 103 trees with a combined DBH of 2,262 inches would be removed or impacted by activities within their critical root zones as part of the proposed project. To mitigate the loss of protected trees the project applicant would be required to obtain a Tree Permit from the Town of Loomis prior to approval of improvement plans. In addition, the proposed project would be subject to all applicable General Plan policies, implementation measures, and General Plan EIR mitigation measures, which would ensure that impacts related to conflicting with any existing policies or ordinances protecting biological resources do not occur. Furthermore, the BRA prepared for the proposed project includes recommendations to ensure impacts related to conflicting with the Town of Loomis Tree Conservation Ordinance do not occur. As discussed above, the Town of Loomis would require a COA for the proposed project to ensure all recommendations included in the BRA are implemented as part of the proposed project, consistent with General Plan Implementation Measures BIO-1.4.1.1 and BIO-1.4.1.2. Therefore, impacts related to conflicting with local policies or ordinances protecting biological resources were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

Galifornia Tree and Landscape Consulting, Inc. Preliminary Arborist Report and Tree Inventory. September 7, 2022.

V.	CULTURAL RESOURCES. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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

a-c. 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.

According to the General Plan EIR, the Town's Planning Area contains 34 known historic resources recognized at the federal, State, and local level. Many known historic resources are located in the downtown core, the oldest portion of the Town. While the General Plan does not directly propose any adverse changes to any historic or archaeological resources, future development allowed under the General Plan could affect known historical and archaeological resources or unknown historical and archaeological resources which have not yet been identified.

The General Plan EIR determined that compliance with the General Plan policies along with implementation measures, General Plan EIR mitigation measures, and existing Town requirements to protect and preserve historic and archaeological resources set forth in the Municipal Code would reduce the significance of impacts to historic and archaeological resources. However, because feasible mitigation to guarantee that the loss, damage, or destruction of historically significant resources and archaeological resources (including human remains) does not exist, the General Plan EIR concluded that buildout of the General Plan would result in a significant and unavoidable impact related to both historical and archaeological resources.

A project-specific Cultural Resources Investigation was conducted by Natural Investigations Company for the proposed project. ¹⁰ At the request of Natural Investigations Company, the California Historical Resources Information Center (CHRIS) completed a records search for the project site and vicinity. The CHRIS records search found that 16 previously recorded prehistoric or historic archaeological resources, or historic buildings or structures, exist within a 0.5-mile radius of the project area. However, the Cultural Resources Investigation determined that the 16 identified previously recorded resources are not located within the project site. The Cultural Resources Investigation also included a Sacred Land Files (SLF) search from the Native American Heritage

Natural Investigations Company. *Cultural Resources Investigations for the 5280 Rocklin Road Premier Homes, Placer County, California.* April 2024

Commission (NAHC). The SLF returned negative results, indicating that known sensitive cultural resources are not present within the project site or vicinity.

In addition to the CHRIS and SLF records search, the Cultural Resources Investigation included a pedestrian survey of the project site. The results of the pedestrian survey included one newly identified historic site, NIC-2024-Rocklin Road-01, within the project site boundaries. However, the Cultural Resources Investigation determined that resource NIC-2024-Rocklin Road-01 lacks association with any significant events or individuals in local, regional, or national history and is not likely to yield historically important information. In addition, resource NIC-2024-Rocklin Road-01 does not reflect distinctive characteristics of a type, period, region, or method of construction, and does not typify a particular era or category and lacks distinctive features. Therefore, according to the Cultural Resources Investigation, NIC-2024-Rocklin Road-01 does not meet the necessary criteria and is not eligible for inclusion in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). Furthermore, the Cultural Resources Investigation determined that resource NIC-2024-Rocklin Road-01 is not considered a significant resource as defined under CEQA PRC Section 21083.2(g) and does not constitute as a historic property as defined under National Historic Preservation Act (NHPA) Section 300308.

The project site is currently developed with a modern-era, two-story single-family residence with an attached two-car garage and metal Quonset hut, located in the northern portion of the project site. According to the Cultural Resources Investigation, the existing on-site structures are ubiquitous throughout the region for construction techniques and materials. Based on review of historic aerials of the project site, the Cultural Resources Investigation determined that the existing single-family residence and garage were constructed between 1984 and 1993. Because the single-family residence and attached two-car garage are less than 50 years old, the existing on-site structures do not qualify for eligibility for the NRHP or CRHR. An approximate age for the metal Quonset hut could not be determined. However, the Cultural Resources Investigation failed to identify any significant associations between the existing on-site structures and historical events or lives of significant people in the past, and, thus, the metal Quonset hut, single-family residence, and attached two-car garage were determined to not be eligible for listing as a historic resource under any NRHP or CRHR criteria. The remainder of the project area is mostly undeveloped, lightly forested land and is underlaid by Andregg series soils, which do not favor the preservation of buried cultural resources. Therefore, according to the Cultural Resources Investigation, the potential of finding undocumented cultural resources within the project site is relatively low.

In the event that previously unknown historical or archaeological resources are discovered during construction or grading activities, the project would be required to comply with all applicable General Plan policies and implementation measures, including, but not limited to, General Plan Policy H-1.1.1, which directs the Town to encourage the maintenance and preservation of significant cultural resources; Implementation Measures H-1.1.1.2a through H-1.1.1.2c, which outline procedures for projects that could adversely affect previously unknown buried cultural resources; and policies related to the Town's role in preserving historical resources (Policy H-1.1.2, H-1.1.3, and H-1.2.1). Implementation of all applicable General Plan policies would avoid potential impacts to significant cultural resources whenever possible and to conduct mitigation if impacts are unavoidable. In addition, the proposed project would be required to adhere to California Health and Safety

Code Section 7050.5 and Section 7052 of California PRC Section 5097 if human remains are uncovered during ground-disturbing activities.

As previously discussed, pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" In the case of the proposed project, compliance with the Town's General Plan policies, implementation measures, and mitigation measures, as well as California Health and Safety Code Section 7050.5 and Section 7052 of California PRC Section 5097, would substantially mitigate potential project impacts to cultural resources.

Based on the above, impacts related to causing a substantial adverse change in the significance of a historic or archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturbing human remains, including those interred outside of formal cemeteries, were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

VI Wa	L. ENERGY. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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. New development that would occur within the Town is assessed to determine if PG&E can accommodate the energy needs of the project. In addition, implementation of policies and implementation measures included in the General Plan would reduce energy use for new development and encourage energy conservation. The policies would also ensure that new development projects use design features, building materials, and building practices that would increase energy efficiency. Thus, the General Plan EIR concluded that a less-than-significant impact would occur related to wasteful, inefficient, or unnecessary energy consumption with the implementation of General Plan policies and implementation measures, as well as potential conflicts with or obstructing a State or local energy plan.

A description of the 2022 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 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 California Building Standards Code (CBSC), which became effective with the rest of the CBSC on January 1, 2023. 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 CALGreen Code standards regulate the method of use, properties, performance, types of materials used in construction, alteration, repair, improvement, and rehabilitation of a structure or improvement to a property. 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 (EV) 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;

¹¹ California Building Standards Commission. 2022 California Green Building Standards Code. 2023.

- 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 photovoltaic (PV) systems 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, which expands upon energy-efficiency measures from the 2019 Building Energy Efficiency Standards, and went into effect starting January 1, 2023. The 2022 standards provide for additional efficiency improvements beyond the 2019 standards. 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 Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently.

Construction Energy Use

Construction of the proposed project would involve increased energy demand and consumption related to the 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 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 by the CARB's In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions from inuse, 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. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. 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 limit emissions associated with construction.

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.

Operational Energy Use

Following implementation of the proposed project, PG&E would provide electricity to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity for interior and exterior building lighting, HVAC, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by residents.

The proposed project would be subject to all relevant provisions of the CBSC, including the Building Energy Efficiency Standards and CALGreen Code. Adherence to the CALGreen Code and Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high-performance attics and walls, and high-efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project site 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 sources to 60 percent of total procurement by 2030.

The General Plan also includes policies such as PSF-1.1.6 (Project Design) and LU-4.1.1 (automobile transportation), which would require projects to consider energy conservation in the project design and be designed to minimize the need to use automobiles for transportation. In addition, General Plan Policies AQGHGE-1.3.1 (electricity), AQGHGE-1.3.2 (renewable energy), and AQGHGE-1.3.3 (energy efficiency), would support energy efficiency incentive programs and the distribution of renewable and low greenhouse gas (GHG) emissions sources of electricity, and encourage energy efficiency measures and increased availability, storage, and use of renewable energy in the Town of Loomis.

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 project site is not anticipated to substantially increase vehicle miles traveled (VMT). Furthermore, residents would have access to public transportation options, including local bus stops and Dial A Ride services. Transit would provide access to several grocery stores, restaurants, and businesses within close proximity to the project site. The site's access to public transit would reduce VMT and, consequently, fuel consumption associated with the future single-family residences.

Based on the above, compliance with the State's latest Energy Efficiency Standards and local regulations would ensure that the proposed project would implement all necessary energy efficiency regulations and would contribute to the efficient use of energy resources.

Conclusion

Based on the above, the proposed project would involve energy use associated with construction activities and operations. Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the project site and associated energy demands have been anticipated by the Town and analyzed in the General Plan EIR. Furthermore, the project would comply with applicable General Plan policies, as well as other State energy standards, which would ensure that 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. Based on the above, impacts related to energy use were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

VI Wo	I. GEOLOGY AND SOILS. buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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

The following discussion is based on the findings of a Geotechnical Engineering Study (Geotechnical Study) prepared for the proposed project by Youngdahl Consulting Group, Inc. (Youngdahl) (see Appendix B). 12

ai-aii. The General Plan EIR identifies the Town as being located in an area with relatively low seismic activity. As discussed on page 4.7-7 of the General Plan EIR, the Town of Loomis does not include any Alquist-Priolo Earthquake Fault Zones and is not located in the immediate vicinity of an active fault. The closest fault to the project site is the Cleveland Hill fault, which is located approximately 46.1 miles to the northwest. Thus, the potential for fault rupture risk at the project site is relatively low.

While the General Plan EIR identified low seismic activity within the region, pursuant to Section 11.04.010 of the Municipal Code, the Town of Loomis has adopted the most recent version of the CBSC. Projects designed in accordance with the CBSC should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance

Youngdahl Consulting Group, Inc. *Geotechnical Engineering Study for Premier Montaire*. September 6, 2022.

with the CBSC can reasonably be assumed to ensure that structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake. In addition, General Plan Policy PHS-1.1.2 requires an engineering analysis for new development proposals in areas with possible soil instability, flooding, or seismic hazards, and requires new development to include project features that minimize such risks. Requirements specific to liquefaction hazards can be mitigated through adherence to the soil and foundation support parameters in Chapters 16 and 18 of the CBSC and the grading requirements in Chapters 18, 33, and the appendix to Chapter 33 of the CBSC.

The General Plan EIR concluded that compliance with applicable General Plan policies and implementation measures, and the CBSC, would ensure impacts related to seismic ground shaking would be less than significant. The proposed project would be subject to the CBSC requirements. In addition, because the proposed project would be consistent with the site's General Plan land use designation, potential ground shaking hazards associated with buildout of the project site have been anticipated by the Town. Overall, impacts related to seismic rupture of a known earthquake fault or strong seismic ground shaking were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

aiii,aiv,

c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed in detail below.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. Additionally, loose unsaturated sandy soils have the potential to settle during strong seismic shaking. Liquefaction can often result in subsidence or settlement.

The General Plan EIR determined that liquefaction Seismic Hazard Zones delineated by the California Geological Survey (CGS) do not exist within the planning area. Given that the potential for strong seismic ground shaking is low and because the planning area is composed of solid, Jurassic-age bedrock, the General Plan EIR determined that buildout of the General Plan would result in no impact related liquefaction, and the issue was not addressed further. In addition, according to the Geotechnical Study, due to the absence of a permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to rock, the potential for liquefaction occurring on-site is low. The nearest known liquefaction zone is located approximately 52.1 miles southwest of the project site.

Furthermore, the CBSC, as adopted by Section 11.04.010 of the Municipal Code, provides standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, which would further reduce the potential for seismic-related ground failure, including liquefaction. Requirements specific to liquefaction hazards can be mitigated through adherence to the soil and foundation support parameters in Chapters 16 and 18 of the CBSC and the grading requirements in Chapters 18, 33, and the appendix to Chapter 33

of the CBSC. Compliance with the aforementioned uniformly applicable development regulations would ensure that the potential for risks related to liquefaction would be less than significant.

The proposed project would be required to comply with the CBSC as established by Section 11.04.010 of the Municipal Code. Given that the proposed project would be consistent with the project site's General Plan land use designation, the risks from liquefaction have been previously analyzed in the General Plan EIR. The EIR concluded that no impact would occur related to seismically induced ground shaking and secondary effects, including liquefaction.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. As discussed in the General Plan EIR, landslide Seismic Hazard Zones delineated by the California Geologic Survey are not present within the Planning Area. Although some slopes located west of Antelope Creek and in the southern portion of the Planning Area exceed 45 percent, the underlying geology in the area is generally comprised of solid geologic foundation materials which are not highly susceptible to landslides. In addition, the majority of the planning area is relatively flat or gentle sloping and is not susceptible to landslides. As such, the General Plan EIR determined that impacts related to landslides would not occur as a result of General Plan buildout. According to the Geotechnical Study, the on-site slopes do not demonstrate indications of slope instability, such as tension cracks, slump blocks, seeps, or springs. In addition, the on-site slopes have adequate vegetation and appropriate drainage away from the slope faces. Thus, impacts related to landslides would be less than significant.

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 bottom of the exposed slope. The project site does not contain any open faces that would be considered susceptible to lateral spreading. In addition, as noted above, the site is not anticipated to be subject to liquefaction hazards. Therefore, the potential for lateral spreading to pose a risk to the proposed development is low.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years, and is a common consequence of liquefaction. As discussed above, on-site soils are not anticipated to be subject to substantial liquefaction risks. Because the site presents low potential for liquefaction, the potential for seismically induced settlement to occur at the project site is also considered to be low. In addition, the General Plan EIR determined that no impact would related to liquefaction (and associated effects. subsidence/settlement). The proposed project would be required to comply with all applicable policies, regulations, and standards set forth by the State and the Town of Loomis. Therefore, impacts related to subsidence/settlement would be less than significant.

Conclusion

Based on the above, impacts related to substantial risks related to liquefaction, landslides, lateral spreading, and subsidence/settlement were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

b. During construction activities, topsoil would be exposed following site grading and prior to constructing building foundations. As a result, the potential for topsoil erosion would exist. Following project development, exposed soils would be covered with impervious surfaces or landscaping and, thus, the potential for erosion to occur would not exist long-term.

Issues related to erosion and degradation of water quality during construction are discussed in Section X, Hydrology and Water Quality, of this Modified Initial Study, under question 'a.' As noted therein, the Town's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project. Additionally, in accordance with Municipal Code Section 12.04.600, Town of Loomis staff would require preparation of an Erosion and Sediment Control Plan that demonstrates how the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction. The erosion control measures included in both the SWPPP and the Erosion and Sediment Control Plan would ensure that the proposed project would not result in substantial erosion or the loss of topsoil.

The General Plan EIR concluded that, with implementation of all required regulations, including preparation of an Erosion and Sediment Control Plan and a SWPPP, impacts related to soil erosion and loss of topsoil would be less than significant. The proposed project would be required to prepare and implement both an Erosion and Sediment Control Plan and a SWPPP. Therefore, impacts related to soil erosion or loss of topsoil were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

d. Expansive soils can undergo significant volume change with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted. Expansive soils can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundation. Building damage due to volume changes associated with expansive soil can be reduced by a variety of solutions. If structures are underlain by expansive soils, foundation systems must be capable of tolerating or resisting any potentially damaging soil movements, and building foundation areas must be properly drained. Exposed soils must be kept moist prior to placement of concrete for foundation construction.

As discussed under Impact 4.7-3 of the General Plan EIR, the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey data indicate that the majority of soils within the Planning Area have a low expansion potential. However, frequently flooded Xerofluvent soils located along Antelope Creek and Boardman Canal have moderate expansion potential. The General Plan EIR determined

that General Plan Policy PHS-1.1.2 would require new development proposals to include a site-specific engineering analysis and include features to reduce geologic hazards associated with expansive soils. In addition, building plans would be reviewed to ensure that structures would be consistent with the practices and standards contained in the CBSC. Therefore, the General Plan EIR determined that through compliance with the applicable General Plan policies and implementation measures, impacts associated with buildout of the General Plan related to being located on expansive soil, creating substantial direct or indirect risks to life or property would be reduced to a less than significant level.

The General Plan EIR includes policies related to soil hazards, including Policy PHS-1.1.2. which includes the Town's requirement for projects located in areas with possible soil instability to submit an engineering analysis and include features that minimize risks. According to the Geotechnical Study prepared for the proposed project, the subsurface exploration conducted as part of the report indicated that native materials encountered were generally non-plastic and are non-expansive. In addition, according to the USDA NRCS Web Soil Survey program, ¹³ mapped soils within the project site consist of Andregg coarse sandy loam, which rates at 1.5 percent expansion potential. Soils with a low expansive potential rate at less than three percent, moderate between three percent and six percent, high between six percent and nine percent, and very high potential above nine percent. Therefore, the on-site clays, when present within the upper portion of the proposed building pads, would not exert significant expansion pressures on building foundations and exterior flatwork. Nonetheless, the proposed project would be required to comply with General Plan Policy PHS-1.1.2 and demonstrate that the project conforms to recommendations included within the Geotechnical Report prepared for the proposed project. In addition, the proposed project would be required to comply with CBSC standards, pursuant to Section 11.04.010 of the Municipal Code, which would ensure that impacts related to constructing on expansive soils would be eliminated through foundation design.

Based on the above, the proposed project would not result in impacts related to substantial direct or indirect risks to life or property related to being 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 that would require further CEQA review.

- e. The proposed project would connect to existing County sewer services. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project, and the proposed project would not result in any effects that would require further CEQA review for this topic.
- f. Paleontological resources or fossils are the remains of prehistoric plant and animal life. The Town's General Plan EIR determined that the planning area contains paleontologically sensitive rock formations, and therefore construction activities associated with buildout of the General Plan could result in accidental damage to, or destruction of, unknown subsurface paleontological resources. The General Plan EIR determined that areas within the Town with the greatest potential to contain paleontological resources are those underlain by Mehrten conglomerate. However, with the implementation of Mitigation Measure 4.7-5, which requires a site-specific analysis of

Natural Resources Conservation Service. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed August 2025.

a project's potential to impact paleontological resources for projects underlain by Mehrten or Ione Formations, or Older Alluvium soils, the General Plan EIR determined that potential impacts to paleontological resources would be reduced to a less-than-significant level. In addition, according to the Town's General Plan, the Penryn and Rocklin Plutons, and the Holocene-age alluvial deposits which comprise most of the planning area, are not considered to be paleontologically sensitive. As such, construction related earth-moving activities in the aforementioned formations would not impact unique paleontological resources.

The project site does not contain any peculiar conditions that would result in increased potential for subsurface paleontological resources. According to the NRCS Web Soil Survey, the site is predominantly characterized by Andregg coarse sandy loam soils, which do not compose of Mehrten conglomerate. ¹⁴ Furthermore, the Geotechnical Study also noted the site's shallow depth to bedrock, further reducing the potential for paleontological resources to be located on-site. As such, the proposed project would not be anticipated to result in direct or indirect destruction of unique geologic features. Finally, the proposed project would be required to comply with all applicable federal, State, and local requirements to avoid potential adverse effects to paleontological resources, if such resources are discovered during ground-disturbing activities on the site.

Based on the above, impacts related to resulting in the direct or indirect destruction of a unique paleontological resource were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

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Natural Resources Conservation Service. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed August 2025.

	III. GREENHOUSE GAS EMISSIONS. ould the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			*

Discussion

a,b. Emissions of GHGs 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 the project 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 common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e/yr$).

Recognizing the global scale of climate change, California has enacted several pieces of legislation in an attempt to address 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), which was approved in 2008, and updated in 2017 and 2022. The Scoping Plan provides the outline for actions to reduce California's GHG emissions and achieve the emissions reductions targets required by AB 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 reductions in line with the Scoping Plan and emissions reductions targets, including AB 32 and SB 32.

The General Plan EIR analyzed the potential for implementation of the General Plan to result in the generation of levels of GHGs that could cause cumulatively considerable impacts to the environment. As discussed under Impact 4.8-1 of the General Plan EIR, buildout of the General Plan would result in GHG emissions per service population which would exceed the applicable GHG per service population efficiency threshold. Mitigation Measures 4.8-1 and 4.8-2 would require the General Plan to include Implementation Measures AQGHGE-1.1.4.4, AQGHGE-1.1.5.1, and AQGHGE 1.1.2.3, which would require the Town to use electric landscape maintenance equipment, monitor the effectiveness of current and future regulations related to GHG reductions, and develop an ordinance to require new development to install electric infrastructure. However, even with the implementation of Mitigation Measures 4.8-1 and 4.8-2, the General Plan concluded

that GHG emissions associated with General Plan buildout could exceed the applicable GHG significance threshold. Therefore, buildout of the General Plan could generate GHG emissions which could conflict with applicable State plans and regulations adopted for the purpose of reducing the emissions of GHGs and could contribute to global climate change. Thus, the General Plan EIR concluded that impacts related to GHG emissions would be cumulatively considerable and unavoidable.

On October 13, 2016, the PCAPCD adopted GHG emissions thresholds for construction and operations in concert with the criteria pollutant threshold update. For project construction, the PCAPCD established a threshold of 10,000 MTCO₂e/yr. Should construction of a proposed project emit GHG emissions in excess of 10,000 MTCO₂e/yr, the project would be considered to have a cumulatively considerable contribution to global climate change.

The PCAPCD's operational thresholds begin with a screening emission level of 1,100 MTCO₂e/yr. Any project below the 1,100 MT CO₂e/yr threshold is judged by the PCAPCD as having a less-than-significant impact on GHG emissions within the PCAPCD and, thus, would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in emissions above the 1,100 MT CO₂e/yr threshold would not necessarily result in substantial impacts, if certain efficiency thresholds are met. The efficiency thresholds, which are based on service populations and square footage, are presented in Table 3.

Table 3				
PCAPCD Operational GHG Efficiency Thresholds of Significance				
Residential (I	Residential (MTCO ₂ e/capita) Non-Residential (MTCO ₂ e/1,000 sf)			
Urban	Rural	Urban	Rural	
4.5	5.5	26.5	27.3	
Source: Placer County Air Pollution Control District. CEQA Handbook. 2017.				

The PCAPCD further advises that regardless of emissions efficiency, should a project result in operational emissions in excess of 10,000 MTCO₂e/yr, the project would be considered to have a cumulatively considerable contribution to global climate change.

Similar to criteria air pollutants, the PCAPCD has identified the approximate size of a project for selected land use categories that would result in operational GHG emissions equal to the bright-line threshold of 10,000 MTCO $_2e$ /yr and the screening level threshold of 1,100 MTCO $_2e$ /yr based on CalEEMod modeling. Thus, if a project is equal to or less than the size identified by the PCAPCD, the project would not be expected to result in emissions of GHG in excess of the applicable thresholds of significance.

The PCAPCD has identified a project size of 646 for single-family residences as the representative size for which operational GHG emissions would exceed the established Bright-Line threshold of 10,000 MTCO₂e/yr. Additionally, the PCAPCD identified a project size of 71 for single-family residences as the representative size for which operational GHG emissions would exceed the De Minimis threshold of 1,100 MTCO₂e/yr. The proposed project would involve the construction of 20 single-family residences, which would be well below the Bright-Line and De Minimis screening level sizes identified by the PCAPCD for single-family residential development. Because the proposed project would be of typical design, the assumptions used in the CalEEMod modeling performed by the PCAPCD to determine the screening level sizes would be sufficient to represent the

proposed project land use and design. Therefore, the proposed project would not generate operational GHG emissions in excess of the identified thresholds of significance for GHG emissions and would not conflict with any State or regional GHG emissions reduction goals. Similarly, given the size of the proposed project, construction emissions associated with the project would also not be anticipated to exceed the PCAPCD's 10,000 MTCO₂e/yr threshold for construction GHG emissions.

Additionally, the General Plan EIR concluded that a significant and unavoidable impact would occur related to GHG emissions associated with General Plan buildout. For those impacts determined to be significant in a General Plan EIR, CEQA Section 15183 allows for future environmental documents to limit examination of environmental effects to those impacts which were not already analyzed as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, GHG emissions associated with buildout of the site have been anticipated by the Town and analyzed in the General Plan EIR. Because associated impacts were previously determined to be significant and unavoidable, pursuant to CEQA Section 15183, further analysis of issues related to GHG emissions is not required in this Modified Initial Study. The proposed project would be required to comply with all applicable General Plan mitigation measures as discussed above.

Conclusion

Based on the above, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Thus, impacts were adequately addressed in the General Plan EIR. Effects peculiar to the proposed project or the project site do not exist. Thus, pursuant to CEQA Guidelines Section 15183, the criteria for requiring further CEQA review are not met.

IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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. According to the General Plan EIR, buildout of the General Plan would result in an increase in the routine transport, use, and disposal of hazardous materials within the planning area. However, the General Plan EIR determined that through compliance with General Plan policies and implementation measures, in combination with existing federal and State regulations, impacts related to the routine transport and accidental release of hazardous materials would be less than significant. The transportation of hazardous materials on roadways is regulated by the California Highway Patrol (CHP), U.S. Department of Transportation (DOT), and California Department of Transportation (Caltrans), and use of such materials is regulated by Department of Toxic Substances Control (DTSC).

According to the General Plan EIR, buildout of the General Plan would include development of industrial land uses in the vicinity of public services and residential land uses. However, the use, storage, and transport of hazardous materials by developers, contractors, business owners, industrial businesses, and others are required to be in compliance with local, State, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. All existing and future projects in the General Plan planning area would be required to comply with federal, State, and local regulations regarding the handling, transportation, disposal, and cleanup of hazardous materials.

Furthermore, the use of hazardous materials is regulated in part by the California Occupational Safety and Health Administration (OSHA), including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs.

Residential uses are not typically associated with the routine transport, use, disposal, or generation of hazardous materials. Operations would likely involve use of common household cleaning products, fertilizers, and herbicides on-site, 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 that would be used on the site, occasional use of such products would not represent a substantial risk to public health or the environment during project operation. Therefore, impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

b,d. The following discussion provides an analysis of potential hazards and hazardous materials associated with upset or accident conditions related to the proposed construction activities and existing on-site conditions.

The General Plan EIR concluded that given compliance with applicable General Plan policies, as well as local, State, and federal regulations related to hazardous waste, impacts related to hazards and hazardous materials would be less than significant.

Construction Activities

Construction activities associated with 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. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local Town 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), 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 Placer County Environmental Health Division) in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, Town, 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 contractor is required to notify the Placer County Environmental Health Division in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures. Compliance with such regulations would ensure that a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions during construction would not occur.

Existing On-Site Hazardous Conditions

The General Plan EIR evaluated potential exposure to hazardous materials under Impact 4.9-1. The General Plan EIR concluded that compliance with all applicable rules and regulations, along with implementation of the General Plan policies, would reduce the potential for adverse impacts from hazardous materials use, including accidental releases to the environment to a less-than-significant level.

With respect to sites with known hazardous materials, Government Code Section 65962.5 requires the California Environmental Protection Agency to annually develop an updated Cortese List. The project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, including the map of DTSC cleanup sites ¹⁵ or the SWRCB's GeoTracker system and list of leaking underground storage tank (LUST) sites. ¹⁶ In addition, the project site is not located on or near any hazardous waste sites identified on the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB. ¹⁷

A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project by Youngdahl Consulting Group, Inc. (Youngdahl) to identify potential recognized environmental conditions (RECs) associated with the project site (see Appendix C). The Phase I ESA included a site reconnaissance on August 11, 2025; review of historical documents of the project site; interviews with Placer County Environmental Health Division (PCEHD) staff and past and present occupants of the project site; and review of appropriate federal, State, and local regulatory agencies to reveal known hazardous waste sites or leaks or spills of hazardous materials at the project site or the project vicinity.

The proposed project would include the demolition of the existing on-site single-family residence. Although the existing on-site residence was constructed in 1984, the historical structures present on the western portion of the project site were constructed in 1978, and the construction date of the Quonset hut is unknown. As such, the potential exists that lead from lead-based paint (LBP) has impacted the soils around the historical structures and Quonset hut.

Federal guidelines define LBP as any paint, varnish, stain, or other applied coating that has one milligram of lead per square centimeter or greater. Lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. In buildings constructed after 1978, the presence of LBP is unlikely. Structures built prior to 1978, and especially prior to the 1960s, are expected to contain LBP. Given that the historical structures were constructed in 1978 and the construction date of the Quonset hut is unknown, the proposed project could potentially expose construction workers to LBP present in the on-site soils. Title 8, CCR Section 1532.1 establishes guidelines related to construction work and demolition of structures that may include lead. As required therein, the contractor must conduct a lead exposure assessment prior to the initiation of any work, and ensure that employees are not exposed to lead at a concentration greater than 50 micrograms per cubic meter of air.

Department of Toxic Substances Control. EnviroStor. Available at: https://www.envirostor.dtsc.ca.gov/public/map. Accessed August 2025.

State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/search. Accessed August 2025.

¹⁷ California Environmental Protection Agency. *Active CDO and CAO*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed August 2025.

⁸ Youngdahl Consulting Group, Inc. *Phase I Environmental Site Assessment The Reserve Placer County APN 045-161-033 Loomis, California.* September 5, 2025.

Furthermore, all work related to LBP is required to be conducted by a California Occupational Health and Safety (Cal-OSHA) registered lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding lead training, engineering controls, and certifications, and any LBP found on-site is required to be removed in accordance with current Cal-OSHA Administration regulations and disposed of in accordance with all CalEPA regulations. Compliance with the aforementioned State regulations would ensure that the proposed project would not result in a potential hazard risk related to LBP.

Further, according to the Phase I ESA, the site reconnaissance and records review identified potential RECs related to a soil stockpile located on the western portion of the project site and pole-mounted transformer along the northern boundary of the project site. Due to the lack of historical information regarding the origin of the soil stockpile Youngdahl determined the stockpile represents an REC. In addition, the potential exists that old transformers located on-site contained polychlorinated biphenyls (PCBs). The historical aerial photographs of the site reviewed as part of the Phase I ESA identified historical agricultural and residential uses on-site during a time when lingering pesticides were in use. As such, the Phase I ESA identified potential RECs related to the presence of organochloride pesticides, lead, and arsenic associated with agricultural uses and termiticides within the on-site soils. Furthermore, the Phase I ESA determined that aerially deposited lead associated with the historical use of leaded gasoline may be present in the soils around Rocklin Road, along the northern boundary of the project site. The review of regulatory databases maintained by County, State, tribal, and federal agencies did not identify documentation of on-site hazardous materials violations, discharges, or contaminated facilities.

Based on the results of the Phase I ESA, Youngdahl recommended that on-site soils be sampled and tested as part of a Phase II ESA to further evaluate potential RECs associated with the project site. Thus, a Phase II ESA was prepared for the project site, and included on-site soil sampling and laboratory testing of soil samples (see Appendix D). 19 Soil samples were collected on September 29, 2025 from around two former buildings that are not present on-site, as well as the existing on-site structures, soil stockpile, pole-mounted transformer, and along Rocklin Road. The laboratory analysis of the soil samples indicated that the on-site soils do not contain lead concentrations in excess of the DTSC residential screening level of 80 milligrams per kilogram (mg/kg). The on-site soils were found to contain concentrations of arsenic up to 1.0 mg/kg, which exceeds the residential environmental screening level of 0.032 mg/kg. However, the concentrations of arsenic detected within the on-site soils were within expected background concentrations. In addition, arsenic is naturally present in soil, and the USEPA and DTSC do not require mitigation for concentrations at or below naturally occurring background levels. Furthermore, laboratory testing indicated that organochlorine pesticides, semi-volatile organic compounds, volatile organic compounds, California Assessment Manual (CAM 17) metals, PCBs, and total petroleum hydrocarbons (TPHs) as diesel, motor oil, and gasoline within on-site soils were below the applicable screening levels for all constituents. Therefore, Youngdahl determined that further review of the project site for potential hazards is not required.

Based on the above, the project site is not anticipated to contain existing on-site hazardous conditions that could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions.

¹⁹ Youngdahl Consulting Group, Inc. *The Reserve Phase II ESA*. October 22, 2025.

Conclusion

Based on the above, the proposed project would not result in any peculiar effects that would require further CEQA review related to creating 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, or through being located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5, and impacts were adequately addressed in the General Plan EIR.

- c. As discussed under Impact 4.9.2 of the Town's General Plan EIR, impacts related to the release of hazardous materials within one-quarter mile of existing or proposed schools were determined to be less than significant with implementation of all applicable General Plan policies and implementation measures. The nearest school to the project site, Franklin Elementary School, is located approximately one mile west of the project site. Therefore, the project site is located further than 0.25-mile of an existing school, and the proposed project would not result in any adverse effects 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. Consequently, further CEQA review is not required for this topic.
- e. The General Plan EIR determined that public airports and private airstrips do not exist in or near the planning area, and that the planning area is not located within the overflight, noise, or other airport hazard zones of any airport. As such, impacts related to airport safety and noise hazards would not occur and were not addressed further in the General Plan EIR.

The nearest airport to the project site is the Lincoln Regional Airport, located approximately 11.3 miles northwest of the project site, and the nearest military airport is the McClellan Air Force Base, located approximately 13.15 miles southwest of the site. The project site is located outside the Airport Influence Areas associated with the Lincoln Regional Airport and McClellan Air Force Base. Therefore, the proposed project would not result in a safety hazard associated with the Lincoln Regional Airport or McClellan Air Force Base for people working in the project area.

Based on the above, risks associated with an airport aircraft accident or emergency landing are not anticipated to occur and the proposed project would not result in an airport-related safety hazard for future residents of the proposed project, and such impacts do not require further CEQA review.

f. The General Plan EIR concluded that, based on the temporary nature of any road closures, lane narrowing, or detours, combined with compliance with Town requirements, building codes, and Policies CIR-6.1.2 and PHS-6.2.2 related to evacuation routes, impacts related to interfering with an adopted emergency response plan, or emergency evacuation plan would be less than significant.

Although the proposed project would include widening of the western half of Barton Road and the southernly half of Rocklin Road to accommodate a proposed turn lane and space to stripe future bicycle routes, development of the proposed project would not result in any substantial modifications to the Town's existing roadway system. During construction of the proposed project, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the Town that could be used as evacuation routes during emergency events. In addition, construction activities would be temporary,

and permanent modifications to the nearby existing roadways would not occur. The project would not interfere with potential evacuation or response routes used by emergency response teams. In addition, General Plan Policy CIR-2.1.1 requires roadway improvements within the Town to conform to the classification system and improvement standards specified in the Town of Loomis Construction Improvement Standards and Land Development Manual. According to the Town of Loomis Construction Standards, the proposed project would be required to prepare a traffic control plan for construction activities.

The Town of Loomis, in collaboration with Placer County and the cities of Auburn, Colfax, Lincoln, and Rocklin, prepared the Placer County Local Hazard Mitigation Plan, adopted in January 2005, to satisfy federal requirements of the Department of Homeland Security and Federal Emergency Management Agency (FEMA). In June 2021, an update to the plan was adopted by the Town Council.²⁰ The plan enables the Town, Placer County, and the other participating communities to take ongoing action to reduce or eliminate long-term risks to human life and property from many types of hazards. The plan was approved by the Placer County Board of Supervisors, the California Office of Emergency Services, and FEMA.

During project operations, the proposed project would provide adequate access for emergency vehicles by way of the new driveway along Barton Road and would not interfere with potential evacuation or response routes used by emergency response teams. Furthermore, the proposed project would not interfere with potential evacuation or response routes used by emergency response teams and would not conflict with the Placer County Local Hazard Mitigation Plan. The proposed project is consistent with the site's General Plan land use designation and zoning, thus, development of the site and associated effects on evacuation routes have been anticipated by the Town. Furthermore, the proposed project would be required to comply with all applicable General Plan policies.

Based on the above, impacts related to interfering with an emergency evacuation or response plan were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

g. Issues related to wildfire hazards are further discussed in Section XX, Wildfire, of this Initial Study. According to the California Department of Forestry (CAL FIRE) Map of Fire Hazard Severity Zones, the project site is not located within or near a State responsibility area (SRA) or lands classified as a Very High Fire Hazard Severity Zone (FHSZ). The nearest SRA is located approximately 1.25 miles east of the project site, and the site is located approximately 3.45 miles from the nearest Very High FHSZ. The Town's General Plan EIR also notes that the Town's planning area does not include a State Responsibility Area or Very High FHSZ. Although the majority of the project site is currently undeveloped, the site is surrounded by existing urban and residential development, which would further reduce risks related to wildfire due to the existing development generally acting as a fuel break. Thus, the potential for wildland fires to reach the project site would be low.

Placer County. *Placer County 2021 Local Hazard Mitigation Plan Update.* June 2021. Available at: https://www.placer.ca.gov/1381/Local-Hazard-Mitigation-Plan. Accessed August 2025.

California Department of Forestry and Fire Protection. Fire Hazard Severity Zones in State Responsibility Area. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed July 2025.

In addition, Implementation Measure PHS-2.1.5.1 of the General Plan EIR requires new development include a wildland fire protection plan demonstrating that vegetation clearance will be maintained around structures while preserving oak trees, as part of the application materials for residential subdivisions proposed within or near oak woodlands. As discussed throughout this Modified Initial Study, the projected site consists of mostly undeveloped, lightly forested land. As such, a Fire Management Plan (FMP) was prepared for the proposed project by Premier Homes LLC (see Appendix E). 22 The FMP includes recommendations related to vegetation modification, building materials, and community design, including the implementation of fire breaks and use of fire-resistant materials, which would reduce the intensity, spread, and number of fires in the project vicinity. Overall, the General Plan EIR concluded that compliance with the recommendations set forth in the FMP, relevant fire safety and wildfire suppression regulations, and the applicable General Plan policies would reduce risks associated with wildfires to a lessthan-significant level. Furthermore, the proposed project would be required to comply with all applicable requirements of the California Fire Code (CFC), as adopted by Sections 11.04.080 and 11.04.085 of the Town's Municipal Code, including installation of fire sprinkler systems. In addition, the CBSC includes requirements related to fire hazards for new buildings. Such features would help to reduce the spread of fire. Finally, the project site is not located on a substantial slope, and the project area does not include existing features that would substantially increase fire risk.

As discussed under Section XX, Wildfire, of this Modified Initial Study, the General Plan EIR determined that wildfire risks associated buildout of the General Plan would be offset with adoption and implementation of the appropriate General Plan policies and implementation measures, as well as compliance with existing fire safety regulations. Given that the proposed project is consistent with the site's General Plan land use designations, and the project site is located within a developed urban area the potential for wildland fires to reach the project site would be low.

Based on the above, wildfire risks were adequately addressed in the General Plan EIR, and the site would not be subject to any peculiar hazards related to the exposure of people or structures, either directly or indirectly, to the risk of loss, injury, or death involving wildland fires. Thus, the criteria for requiring further CEQA review are not met.

Premier Homes LLC. *The Reserve Fire Management Plan.* April 18, 2025.

X. Would	HYDROLOGY AND WATER QUALITY. If the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
di: de	iolate any water quality standards or waste scharge requirements or otherwise substantially egrade surface or ground water quality?			×
ini su	ubstantially decrease groundwater supplies or terfere substantially with groundwater recharge uch that the project may impede sustainable oundwater management of the basin?			*
sit cc	ubstantially alter the existing drainage pattern of the te or area, including through the alteration of the burse of a stream or river or through the addition of appervious surfaces, in a manner which would:			
	 Result in substantial erosion or siltation on- or off-site; 			*
	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?			*
	flood hazard, tsunami, or seiche zones, risk release pollutants due to project inundation?			*
e. Co qu	onflict with or obstruct implementation of a water uality control plan or sustainable groundwater anagement plan?			*

Discussion

a, The following discussion provides a summary of the proposed project's potential to violate ci-ciii. water quality standards/waste discharge requirements, alter the drainage pattern of the site resulting in erosion or siltation, increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or otherwise degrade water quality during construction and operation. Information was sourced primarily from a Preliminary Hydrologic and Hydraulic Study (Hydrologic Report) prepared for the proposed project by TSD Engineering, Inc. (TSD) (see Appendix F).²³

The General Plan EIR concluded that adherence to State and local laws and regulations and General Plan Policies LU-1.3.3 through LU-1.3.6 related to the preservation of natural features within the planning area, as well as PHS-1.1.3 and PHS-1.1.4, which implement limitations related to ground disturbing activities, would reduce the potential for development projects associated with General Plan buildout to substantially degrade water quality or violate State water quality standards due to sediments or other contaminants to a less-than-significant level. In addition, the General Plan EIR concluded that adherence to the aforementioned General Plan policies, as well as General Plan policies LU-2.3.6, BIO-1.2.1, and BIO-1.2.2 would reduce the potential for buildout of the General Plan to substantially alter existing drainage patterns or add impervious surfaces

TSD Engineering, Inc. The Reserve Town of Loomis, CA Preliminary Hydrologic and Hydraulic Study. July 16, 2025.

in a manner that would result in substantial erosion or siltation, increase the rate or amount of surface run off, or exceed the capacity of existing of planned stormwater drainage systems to a less-than-significant level

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 with impervious surfaces and structures, the potential exists for wind and water to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality.

The Town of Loomis's Stormwater Quality Management and Discharge Control Ordinance requires that development projects comply with the requirements of State and federal laws related to water quality. Chapter 10.08 of the Town's Municipal Code is based on the NPDES Municipal Stormwater Discharge Permit and prohibits illicit discharges to the Town's storm drain system, as well as adopts requirements related to source controls, stormwater pollution, and erosion control. Additionally, the proposed project and all future on-site construction would be subject to Chapter 12.04 of the Town's Municipal Code, which establishes standards and procedures for grading and excavating to reduce the harmful effects of runoff (including inundation and erosion), assure proper restoration of vegetation and soil systems disturbed by authorized grading or fill activities, and protect stream corridors. Pursuant to Section 12.04.240, obtaining a grading permit requires submittal of erosion and sediment control plans for review and approval.

The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in land disturbance of one or more acres. The Town's NPDES permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's General Construction Permit requires any project that would disturb more than one acre of land to prepare a SWPPP. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project.

With implementation of the required SWPPP and BMPs included therein, construction of the proposed project would not result in a violation of water quality standards and/or degradation of water quality. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association Stormwater BMP Handbooks and implemented by the project contractor. Because the proposed project would disturb greater than one acre of land, the proposed project would be subject to the requirements of the State's General Construction Permit. Should the proposed project not include preparation and compliance with a SWPPP, a significant impact may occur.

Additionally, in accordance with Section 10.08.090 and Section 12.04.240 of the Town's Municipal Code, which enforces the Town's NPDES permit and requires submittal of an erosion and sediment control plan, respectively, the proposed project would control surface runoff and erosion and retain sediment on the project site during project construction.

Based on the above, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during construction.

Operations

Following project buildout, the majority of site surfaces would be covered with either impervious surfaces or pervious landscaped areas, and the existing topsoil would not be exposed. As such, the potential for erosion and associated impacts to water quality would be reduced. However, the addition of impervious surfaces on the site would result in the generation of urban runoff during project operations, which could contain pollutants if the runoff comes into contact with vehicle fluids on parking surfaces and/or landscape fertilizers and herbicides. During the dry season, vehicles and other urban activities may 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 by way of stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed, which would provide a more lucrative means of transport for pollutants to enter the waterways.

The project site is currently mostly comprised of pervious surfaces, including lightly forested oak woodland. The proposed project would subdivide the project site into 20 single-family residential lots, ranging from 40,000 sf to 136,612 sf with an average lot size of 54,628 sf. Future development of the proposed lots would result in 20 new single-family residences, as well as a new drive aisle and sidewalk connecting to Barton Road. Future construction of on-site residences would require the development zones within each subdivided lot to be covered with new impervious surfaces. Stormwater runoff from impervious surfaces such as roofs, roadways, and sidewalks within the project site would be captured by four water quality swales located throughout the project site which would connect to 24-inch and 12-inch storm drain lines to convey stormwater flows downgrade to the on-site pond.

NPDES-regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately sized source control measures. The project site would be divided into 14 DMAs which would each cover the acreage of multiple drainage sheds (see Figure 7). According to the Hydrologic Report prepared for the proposed project, permanent water quality measures would be implemented at various locations throughout the site. Measures that reduce or eliminate post-construction-related water quality problems range from source controls, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. Source control measures within each DMA would be designed consistent with recommendations from the Town's Land Development Manual and the Placer County Stormwater Management Manual, which include BMPs to be implemented to mitigate impacts from new development projects. According to the Hydrologic Report, the proposed site design measures would reduce on-site stormwater runoff from impervious surfaces and provide adequate water quality treatment and runoff reduction for the proposed subdivision.

To assess the changes in runoff volumes from the project site that could occur due to the proposed project and future on-site development, the Hydrologic Report included calculations comparing the pre- and post-construction peak flow volumes for on-site drainage sheds. The project would capture and discharge flow from 14 DMAs, as seen on Figure 7, into four drainage swales. Treated runoff would exit the swales and flow down grade into the on-site pond. The discharge points are also shown on Figure 7. Pre- and post-construction peak flows for each discharge point are presented in Table 4 below.

Table 4					
Pre- to Post-Development Discharge Flow Comparison					
Discharge Location	Discharge Location Shed Numbers Q10 Q100				
	Pre-Development				
Point 1	X1	10.07	20.90		
Point 2	X2 and O1	6.01	10.98		
Point 3	X13 and O3	2.70	5.39		
Point 5	X3, X4, and O2	15.18	27.93		
Point 7	X5 and O4	14.44	26.47		
Point 8	X6	4.23	8.21		
Point 15	X7-X11 and O5-O7	53.72	96.80		
Point 16	X12	0.15	0.30		
Post-Development					
Point 1	X1	10.07	20.90		
Point 2	A1-A2 and O1-O2	15.69	28.89		
Point 3	O3 + O3-A	1.57	3.26		
Point 7	A3, B1-B5, C1-C3, and X5	14.36	25.95		
Point 8	A4	3.2	6.30		
Point 15	A5, C4-C6, X7-X11, and O5-O7	50.88	92.54		
Point 15A	A6	2.64	4.73		
Point 16	X12	0.15	0.30		

Notes: Q = the amount of discharge during the 10-year and 100-year storm events

- 1. Attenuation of existing runoff from Offsite Sheds O6 & O7 and Onsite Sheds X8 & X10 due to the existing culverts in Rocklin Road is not accounted for at this time. Hydraulically, roadway cross-culverts will develop a certain amount of headwater on their upstream end to convey flow. This developed headwater condition will attenuate peak flows from the contributing sheds.
- 2. Attenuation of existing runoff from Onsite Sheds X2 X9 & X11 due to localized ponding is not accounted for at this time. Further evaluation of existing topography to determine localized low-points and/or depressions (if any) will be addressed at final design.

Source: TSD Engineering Inc., July 2025.

In addition, the Hydrologic Report analyzed the pre- and post-developed condition volumetric runoff on-site to confirm the existing pond could adequately accommodate the developed stormwater. Based on the analysis, the Hydrologic Report determined that the post-developed condition volumetric runoff would be 243,252 cubic feet (CF), an increase in 37,325 CF of runoff volume as compared to the 205,927 CF of volumetric runoff during the pre-developed condition. According to the Hydrologic Report the increase of 37,325 CF of runoff volume equates to an increase of 1.57 inches in depth when spread over the surface area of the existing pond. As the increase in pond depth is minimal, the Hydrologic Report determined that the basin could accommodate the developed condition runoff.

Based on the above, water quality standards or waste discharge requirements would not be violated, and downstream water quality would not be degraded as a result of operations of the proposed project.

Conclusion

The General Plan EIR concluded that required compliance with the SWPPP, NPDES General Construction Permit, Town ordinances, and adherence to General Plan policies would render any potential construction and operational impacts to water quality and drainage patterns less than significant. As discussed above, the proposed project would comply with the aforementioned requirements. Therefore, impacts related to violation of

water quality standards or degradation of water quality during construction or operation, as well as impacts related to substantially altering the existing drainage pattern of the site or area, were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

As discussed under Impact 4.10-2 of the General Plan, buildout of the General Plan would b,e. result in an increase in impervious surfaces within the planning area that could result in a reduction in the amount of rainfall that would percolate through the soil and result in groundwater recharge. However, the majority of the Town includes shallow soils underlain by bedrock that provide a low level of groundwater recharge. The General Plan EIR determined that compliance with General Plan policies PSF-1.4.1, PSF-1.4.2, and PSF-1.5.3 would reduce groundwater use by encouraging water-conserving design, landscaping, fixtures, and agricultural operations. In addition, new development within the planning area would be required to connect to community water supply systems. Furthermore, the Town of Loomis is not located within a defined groundwater basin, and is not subject to the requirements of the Sustainable Groundwater Management Act. As such, the General Plan EIR determined that through compliance with the applicable General Plan policies and implementation measures, as well as relevant local, State, and federal policies and regulations, impacts related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge would be less than significant. In addition, the General Plan EIR determined that through compliance with the applicable General Plan policies and implementation measures, as well as relevant local, State, and federal policies and regulations, impacts related to conflicts with or obstructing implementation of a water quality control plan or sustainable groundwater management plan would be less than significant.

Water supplies for the project site would be provided by PCWA. Although the majority of PCWA's water supply consists of water diverted from the American river, a portion of PCWA's water supply comes from groundwater. The proposed project would result in an increase in impervious surfaces within the project site, which would reduce the infiltration of groundwater as compared to existing conditions. However, the project site represents a relatively small area compared to the size of the groundwater basin and, thus, does not currently represent a substantial source of groundwater recharge. In addition, the project site has been previously designated for urban development, and the loss of groundwater infiltration at the site due to development has been previously anticipated in the General Plan EIR. Therefore, the proposed on-site residential development would not interfere substantially with groundwater recharge. PCWA provides the Town approximately 285,400 acre-feet per year (AFY) of potable water. The County's 2020 Urban Water Management Plan (UWMP) includes a water service reliability assessment of the County's projected supplies and demands during normal, single dry, and five consecutive dry years. Under the various water year types, the total annual water supply sources available are compared to the total annual projected water use for the County's water service area from 2025 to 2040 in five-year increments. The County is projected to have a surplus of water supplies in all water year types through 2040.

The proposed project is consistent with the site's General Plan land use designation and would not generate an increase in water demand beyond what has already been generally anticipated in the UWMP and General Plan EIR. As such, adequate capacity is expected to be available to serve the proposed project's water demands. Therefore, while a portion of the water supplied to the project site by the County could be obtained through groundwater resources, such groundwater usage has been anticipated and would not

substantially deplete groundwater supplies within the project area. The proposed project would result in an increase of impervious surfaces within the project site, which would reduce the infiltration of groundwater as compared to existing conditions. However, stormwater runoff from such impervious surfaces would be directed to the proposed stormwater drainage system. The stormwater drainage system would include new and existing drainage swales to capture on-site stormwater runoff and convey flows to the existing on-site pond located in the southwestern portion of the project site.

Based on the above, potential impacts related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

- The General Plan EIR included an analysis of flood risks under Impact 4.10-4 and civ. determined that buildout of the General Plan would increase the amount of impervious surfaces and surface runoff in the planning area, which could result in greater potential for flooding. However, the General Plan EIR concluded that through compliance with the policies and implementation measures included in the General Plan, as well as relevant drainage and flood control regulations, impacts related to flood hazards would be less than significant. Such policies would include General Plan Policies PHS-3.1.1 through PHS-3.1.6, which would reduce flooding by placing new structures and critical facilities outside of FEMA floodplains using appropriate setbacks, and Policies PHS-1.5.1 through PHS-1.1.3, which outline requirements for new drainage facilities as specified in the Town of Loomis Master Drainage Plan and West Placer County Water Quality Design Manual. In addition, according to the Hydrologic Report, the project site is included in FEMA Flood Insurance Rate Map 06061C0962H, and is located in Zone X which is not identified as a Special Flood Hazard Area (see Appendix F). Thus, the project would not include development within a Special Flood Hazard Area and would not be subject to projectspecific design features related to flood hazards. Based on the above, adverse impacts related to impeding or redirecting flood flows were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.
- d. Impacts related to flooding risks are discussed under question 'c.iv' above. Although the General Plan EIR does not evaluate potential impacts related to tsunami or seiche zones, the General Plan EIR concludes that with implementation of General Plan policies and implementation measures, and adherence to the Municipal Code, impacts related to flooding would be less than significant. In addition, because the project site is not located in the proximity of a shoreline or a closed body of water, the proposed project would not be subject to adverse impacts related to tsunami or seiche zones. Therefore, impacts related to flooding were adequately addressed in the General Plan EIR, and the proposed project would not result in any effects that would require further CEQA review for this topic.

XI Wo	LAND USE AND PLANNING. buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			×

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. The project site is generally surrounded by rural single-family residences. The proposed project would include development of 20 new single-family residences, which would be consistent with the existing adjacent land uses. Therefore, the proposed project would be a continuation of the surrounding urban development and would not isolate an existing land use. Furthermore, the proposed project is consistent with the site's existing land use designation. Therefore, the proposed project would be consistent with the type and intensity of development that has previously been anticipated for the site by the Town and analyzed in the General Plan EIR. The General Plan EIR concluded that the General Plan includes policies which would enhance and protect existing neighborhoods, as well as discourage the physical division of established communities. Additionally, the 2021-2029 Housing Element includes specific goals and policies to protect residents from displacement and preserve housing stock.

Based on the above, the project would not result in new development or features that would divide existing residential neighborhoods or communities. As such, impacts related to physically dividing an established community were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. The proposed project would be consistent with the site's current RR General Plan land use designation. As discussed throughout this Modified Initial Study, the proposed project would not result in any new significant environmental effects that were not previously identified in the General Plan EIR and could not be substantially mitigated by uniformly applicable development policies and standards, pursuant to CEQA Guidelines Section 15183. In addition, the proposed project would not conflict with Town policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the Town's tree conservation ordinance, the Town's noise standards, and applicable SWRCB stormwater regulations. Therefore, the proposed project would not cause a significant environmental impact in excess of what has already been analyzed and anticipated in the General Plan EIR. As such, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact and further CEQA review for this topic would not be required.

	II. MINERAL RESOURCES. buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			*

a,b. The project site is located in a generally developed area of the Town. Given that the project site is located within a developed area, the site would not be anticipated to contain mineral resources. In addition, according to the Town's General Plan, the planning area does not include current or planned commercial mining activities or areas classified as Mineral Resource Zone 2 (MRZ-2), areas which contain mineral resources of regional importance. Furthermore, commercial mineral extraction operations are not active within the project site, and the project site is not classified as a site with known or potential significant mineral deposits. Finally, mineral extraction activity on the project site would not be compatible with the existing uses within the site and in the vicinity. Given that the proposed project is consistent with the existing land use and zoning designations, development of the project site with the proposed residential uses has been anticipated by the Town.

Based on the above, the proposed project would not result in the loss of availability of a known local- or State-defined mineral resource. Thus, the proposed project would not result in any peculiar effects related to mineral resources such that further CEQA review for this topic would be required.

	III. NOISE. ould the project result in:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			×

- a. The discussion below presents information regarding sensitive noise receptors in proximity to the project site, applicable noise standards, the existing noise environment, and the potential for the proposed project to result in noise 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 dB in this report will be Aweighted unless noted otherwise.
 - Community Noise Equivalent Level (CNEL): The cumulative noise exposure over a 24-hour period. Weighting factors of +5 and +10 dBA are applied to the evening and nighttime periods, respectively, to account for the greater sensitivity of people to noise during those periods.
 - 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 (Leq): The average sound level over a given time-period.
 - Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
 - Median Sound Level (L₅₀): The sound level exceeded 50 percent of the time 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 the existing single-family residences adjacent to the site, with the nearest residences located to the west and south of the project site.

Standards of Significance

Section 13.30.070 of the Town's Municipal Code establishes noise regulations within the Town. Pursuant to Section 13.30.070, noise levels at residential uses are not allowed to

exceed 65 dBA at outdoor activity areas and 45 dBA at interior spaces. Should project operational noise result in exterior noise levels exceeding 65 dBA, due to the adjacent single-family residences, the proposed project would be considered to result in a significant operational noise impact. With respect to project construction, the Town has not adopted quantitative noise thresholds for construction activities. Table 3-4 under Section 13.30.070(C)(3) of the Municipal Code limits hours of construction to 7:00 AM and 7:00 PM, Monday through Friday, between the hours of 8:00 AM to 7:00 PM on Saturdays, and between the hours of 9:00 AM and 5:00 PM on Sundays and national holidays with explicit Town approval.

In addition, General Plan Policy Noise-1.1.16 establishes that the Town shall consider an increase of 12 dBA over ambient noise levels to be a potentially significant temporary construction noise impact. The 12 dBA increase is consistent with the Caltrans increase criteria and is approximately equivalent to a doubling of sound energy.

Pursuant to General Plan Implementation Measure Noise-1.2.1.1, the Town has also adopted guidance consistent with the Federal Interagency Committee on Noise (FICON) guidance for determining increases in project-related noise. The criteria shown in Table 5 was developed by FICON as a means of developing thresholds for impact identification for project-related traffic noise level increases. FICON's significance thresholds are used to identify the significance of an incremental increase in noise levels.

Table 5 FICON Noise Exposure Increases for Determining Level of Significance				
Noise Exposure without Project Potential Significant Impact				
< 60 dB CNEL	+5 dB or more			
60-65 dB CNEL	+3 dB or more			
>65 dB CNEL +1.5 dB or more				
Source: Federal Interagency Committee on Noise (FICON), 2000.				

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, the California Energy Commission (CEC) considers project-related noise level increases between five to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding significant noise impacts as low as 1.5 dB, provides a conservative approach to the impact assessment for the proposed project and are used as the applicable noise increase threshold to analyze project-generated operational traffic noise, as discussed in further detail below.

Impact Analysis

The General Plan EIR included an analysis of potential noise impacts associated with construction and operation of new development occurring pursuant to the General Plan under Section 4.12. The General Plan EIR concluded that compliance with the Town Noise Ordinance, General Plan Policy Noise-1.1.16, and Implementation Measures Noise-1.1.16.1 and Noise-1.1.16.2 would minimize potential impacts related to temporary increases in ambient noise levels during construction activities. However, feasible mitigation does not exist to ensure construction noise would be below the Town's noise standards in all cases. Therefore, the General Plan EIR determined that impacts related to temporary noise increases related to construction activities would remain significant and unavoidable.

With respect to permanent noise level increases, as discussed under Impact 4.12-2 of the General Plan EIR, regarding transportation noise sources, increases in transportation noise under the General Plan are not expected to exceed the land use noise compatibility standard for transportation noise included in General Plan Noise Implementation Measure Noise-1.1.17.1. Therefore, the General Plan EIR determined that impacts related to increases in transportation noise would be less than significant. However, as discussed under Impact 4.12-3, regarding stationary noise sources, buildout of the General Plan would accommodate a variety of land uses that could result in increases in nontransportation noise. Non-residential construction within the planning area would be subject to the Town's discretionary review and required to incorporate feasible mitigation to reduce effects on existing noise-sensitive land uses, such as operating at less noisesensitive parts of the day, buffering, sound insulation, and other strategies. However, while some land uses would experience a reduction in ambient noise levels through implementation of the General Plan, existing noise-sensitive land uses located near commercial uses along heavily traveled roadways and near existing and future industrial operations with outdoor operations, large-scale commercial uses that accommodate frequent heavy-duty truck trips, and other noise-generating uses could experience increases in non-transportation noise that exceed the applicable relative noise level thresholds. Despite the implementation of goals, policies, and implementation measures included in the General Plan, the Town cannot demonstrate that adverse operational noise exposure impacts could be avoided in all cases. Furthermore, the General Plan EIR determined additional feasible mitigation measures beyond the policies included in the General Plan are not available, and as a result, the General Plan EIR concluded that General Plan buildout would result in a significant and unavoidable impact related to creating substantial permanent increases in ambient noise levels.

The following sections provide an analysis of potential noise impacts associated with operation, construction, and traffic noise of the proposed project. It should be noted that the project site is not located on any road segments identified by the General Plan EIR as exceeding the applicable noise thresholds.

Project Construction Noise

During construction of the proposed project, heavy-duty equipment would be used for grading, excavation, paving, and building construction, which would temporarily increase ambient noise levels when in use. 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, loaders, and haul trucks would be used in association with the proposed activities.

Table 6 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet. As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source decrease at a rate of approximately 6 dB per every doubling of distance from the noise source. Construction of the proposed project would be required to comply with the limited construction hours set forth by Section 13.30.060 of the Municipal Code. Construction activities would be temporary in nature and are anticipated to occur during normal daytime hours, consistent with Section 13.30.060 of the Municipal Code.

Table 6 Construction Equipment Noise						
Type of Equipment Maximum Level, dB 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: Federal Highway Administration, Roadw	yay Construction Noise Model User's Guide.					

As shown in Table 6, activities involved in typical construction would generate maximum noise levels up to 90 dB at a distance of 50 feet. As previously discussed, the project site is generally surrounded by existing residential uses. Thus, construction activities associated with the proposed project would likely result in a temporary noise level increase that would exceed 12 dBA over ambient noise levels. However, the proposed project is consistent with the site's current General Plan land use designation. Therefore, construction noise associated with buildout of the proposed project has been generally anticipated, and the proposed project would not result in any peculiar effects related to an increase in ambient noise levels. The General Plan EIR determined that compliance with Implementation Measures 1.1.16.1 and 1.1.16.2 as set forth under Impact 4.12-1 would ensure that construction noise associated with the project would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project site. The proposed project would be required to comply with the aforementioned implementation measures to reduce construction noise as a condition of project approval. The noise reduction measures required therein include, but are not limited to, prohibiting all construction activities from occurring during restricted hours and times of year; fitting construction equipment and vehicles with noise suppression devices, such as mufflers; installing temporary noise barriers between noise-generating activity and noise-sensitive uses; and locating stationary noise-generating equipment away from sensitive receptors. Therefore, construction activities associated with the proposed project would not result in new significant noise impacts relative to what was analyzed in the General Plan EIR.

Project Operational Noise

January 2006.

Residential uses are not typically considered substantial sources of noise. Noise-generating operations associated with the proposed single-family residences would primarily consist of landscaping maintenance, HVAC systems, and other typical activities. Such activities are not expected to generate noise levels exceeding the Town's exterior noise level standards. Therefore, on-site operation of the proposed project would not be considered to generate a substantial permanent increase in ambient noise levels in the vicinity of the project.

The primary noise source associated with operation of the proposed project would be traffic noise. The Town of Loomis does not have a significance threshold for increases in transportation noise sources. In the absence of a specific threshold, the FICON criteria established in Table 5 are used to assess increases in ambient noise environment.

According to Table 4.12-5 of the Town's General Plan EIR, the existing baseline traffic noise level on the segment of Barton Road from Rockline Road to Indian Springs Road, on which the project site is located, is 63.6 dB. As shown in Table 5, where existing traffic noise levels are 60 to 65 dB L_{dn} , a three dB L_{dn} increase in roadway noise levels would be considered significant.

Generally, a doubling in traffic volumes is required to increase traffic noise levels by three dB. According to the Traffic Evaluation Memorandum prepared for the proposed project, the proposed project is anticipated to add 190 net new daily trips. Therefore, due to the nature and relatively small size of the proposed project, substantial daily vehicle trips sufficient to double traffic volumes would not be generated on local roadways as a result of the proposed project. Additionally, the proposed project would be consistent with the project site's current land use designation. Therefore, traffic increases associated with residential uses on the project site have been previously anticipated by the Town and addressed in the General Plan EIR and, thus, would not substantially increase traffic noise in the project vicinity.

Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, impacts related to an increase in noise associated with buildout of the proposed project have been anticipated by the Town and analyzed in the General Plan EIR. The proposed project would not involve any operations or uses that would result in new, or increase the severity of, impacts identified in the General Plan EIR.

Conclusion

Based on the above, impacts related to temporary or permanent noise level increases were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

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 to 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.

The General Plan EIR included an analysis of potential vibration impacts associated with buildout of the General Plan under Impact 4.12-4. The General Plan EIR determined that implementation of the General Plan policies would avoid significant impacts. Therefore, through adherence to the requirements, policies, and strategies in the General Plan, the General Plan EIR concluded that vibration impacts would be less than significant.

During 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. Table 7, which was developed by the Caltrans, shows that the vibration levels that would normally be required to result in damage to structures range from 0.2 to 0.6 in/sec PPV. The general threshold at which human annoyance could occur is 0.10 in/sec PPV.

Table 7							
	Effects of Vibration on People and Buildings						
PP	٧						
mm/sec	in/sec	Human Reaction	Effect on Buildings				
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	unacceptable to some peop 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,							

The primary vibration-generating activities associated with the proposed project would occur during construction, as the proposed project would not involve any uses or operations that would generate substantial groundborne vibration. Table 8 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with project construction would be the use of vibratory compactors, which exceeds the 0.20 in/sec threshold at 25 feet.

2002.

Table 8 Vibration Levels for Various Construction Equipment					
Type of Equipment PPV at 25 feet PPV at 50 feet (in/sec) PPV					
0.089	0.031	0.011			
0.076	0.027	0.010			
0.003	0.001	0.000			
0.089	0.031	0.011			
0.035	0.012	0.004			
0.070	0.025	0.009			
0.210	0.074	0.026			
	els for Various PPV at 25 feet (in/sec) 0.089 0.076 0.003 0.089 0.035 0.070 0.210	els for Various Construction E PPV at 25 feet (in/sec) PPV at 50 feet (in/sec) 0.089 0.031 0.076 0.027 0.003 0.001 0.089 0.031 0.035 0.012 0.070 0.025			

Use of vibratory compactors/rollers could be required during construction of the proposed roadways. The nearest existing structure is located approximately 100 feet to the west of the project site. Therefore, the existing single-family residences would not be impacted by use of vibratory compactors/rollers. In addition, construction activities would be temporary in nature, occur throughout the project site, and are anticipated to occur during normal daytime working hours. Such factors would further reduce the intensity of vibration levels experienced at the existing single-family residences located to the south and west.

Based on the above, impacts related to vibration were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

c. The General Plan EIR determined that public airports and private airstrips do not exist in or near the planning area, and that the planning area is not located within the overflight, noise, or other airport hazard zones of any airport. As such, impacts related to airport safety and noise hazards would not occur and were not addressed further in the General Plan EIR.

The closest airport to the project site includes the Lincoln Regional Airport, located approximately 11.3 miles northwest of the project site and the nearest military airport is the McClellan Air Force Base, located approximately 13.15 miles southwest of the site. Based on the location of the project site, the site is not located within the noise contour areas associated with the Lincoln Regional Airport or McClellan Air Force Base. The project site is not subject to any airport land use plans and, thus, impacts related to excessive noise levels from private airstrips or heliports would not occur.

Based on the above, impacts related to aircraft noise were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review for this topic.

	IV. POPULATION AND HOUSING. buld the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			*

a. The General Plan EIR determined that implementation of the General Plan would result in population growth in the Town of Loomis. However, the General Plan is designed to balance future housing, office, retail, commercial, and industrial uses to accommodate such growth. In addition, the Town has included various goals and policies within the General Plan designed to avoid unplanned development that could be induced through infrastructure expansions, such as policies LU-2.1.4, LU-4.2.1, and AQGHGE-1.1.6-6. The land use policies included in the General Plan would not induce development beyond what was planned by the Town and addressed in the General Plan EIR. Thus, impacts related to population growth would be less than significant.

The proposed project would include the development of 20 new single-family residences on a site that is designated for such development. Using the Town of Loomis average persons per household value of 3.02, the proposed project would result in a maximum estimated population of 61 residents. Based on the 2020 Census, the U.S. Census Bureau estimates the population of Loomis to be approximately 6,836 people. The increase in population associated with the proposed project would constitute a 0.01 percent increase in the Town's total population, which would not be considered substantial growth. In addition, because the project is consistent with the site's current land use designation, potential growth associated with development of the site has been anticipated by the Town. As such, the potential population growth associated with buildout of the site with the proposed uses was analyzed in the General Plan EIR and would not constitute unplanned population growth.

Based on the above, the proposed project would not result in any peculiar effects related to inducing substantial unplanned population growth in an area, either directly or indirectly, and further CEQA review related to such is not required.

b. The General Plan EIR discussed the potential displacement of people and existing housing under Impact 4.11-4. As discussed therein, compliance with General Plan Policy LU-1.5.2 and the adopted 2021-2029 General Plan Housing Element would ensure that new development pursuant to the General Plan would not displace substantial numbers of people. In addition, the General Plan does not propose converting established residential areas to nonresidential land uses or redeveloping existing residential areas with new residences by removing existing dwelling units. Therefore, potential impacts

U.S. Census Bureau. Loomis town, California. Available at: https://data.census.gov/profile/Loomis_town,_California?g=160XX00US0643140#families-and-living-arrangements. Accessed August 2025.

related to displacement of people and existing housing were determined to be less than significant.

The project site consists of mostly undeveloped, lightly forested land with an approximately 4.6-acre pond occupying the southwestern portion of the site. The site also includes an existing single-family residence on the northern border. The existing single-family residence would be demolished as part of the proposed project. As such, the proposed project would displace the existing on-site residents. However, although one residence would be removed from the Town's housing stock, the proposed project would include the subdivision of the project site into 20 single-family lots. Subsequent buildout of the project site with residential uses would result in a minimum net increase of 19 on-site residences, which would add to the housing stock within the Town. As such, the proposed project would not displace substantial numbers of existing people or housing and would not necessitate the construction of replacement housing elsewhere. Therefore, impacts related to displacement of substantial housing or people were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

XV. **PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or Impact physically altered governmental facilities, need for new Significant Significant Adequately Impact Peculiar or physically altered governmental facilities, the Impact due to Addressed in to the Project or New Information the General construction of which could cause the Project Site sianificant Plan EIR environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? a. × Police protection? b. Schools? C. d. Parks? Other Public Facilities?

Discussion

a,b. The General Plan EIR concluded that although General Plan buildout would likely result in increased demand for fire protection and police services, such increases in demand would not result in the need for additional fire protection or police facilities. According to the General Plan EIR, if future requests for land use amendments result in the need for new facilities, the facilities would be located within the Planning Area analyzed in the EIR. In addition, the General Plan includes policies and implementation measures that are specifically designed to reduce or avoid environmental impacts of construction, including construction of public facilities. Furthermore, the General Plan EIR concluded that adherence to the relevant General Plan policies would ensure that adequate facilities would be available to accommodate current and future needs of the Town. Therefore, according to the General Plan EIR, buildout of the General Plan would result in a less-than-significant impact related to fire and police protection services.

Fire protection services would be provided to the site by the South Placer Fire District (SPFD). SPFD operates five staffed fire stations and one volunteer station to serve area of 55 square miles with 42,000 residents across the communities of Loomis, Granite Bay, and the southern areas of Penryn and Newcastle. SPFD operates one fire station within the Town of Loomis. According to the General Plan EIR, when the SPFD is fully staffed, 173 personnel are on duty for fire and emergency medical services (EMS), and 34 personnel are on duty for emergency ambulance services. The closest fire stations to the project site are Fire Station 18, located approximately three miles north of the site at 5840 Horseshoe Bar Road and Fire Station 19, located approximately three miles southeast of the site at 7070 Auburn Folsom Road.

The project site is located within the jurisdiction of the Placer County Sherrif's Department (PCSD). The PCSD operates from the South Placer Substation and is staffed with 59 sworn personnel. The South Placer Substation is located at 6140 Horseshoe Bar Road, approximately 2.7 miles north of the project site.

While the proposed project could result in increased demand on fire and police protection services, the project site was generally anticipated for development with the proposed uses under the existing RR land use designation. Therefore, the increase in the overall demand on fire and police protection services associated with development of the proposed project has been previously anticipated by the Town and analyzed in the General Plan EIR.

In addition, the proposed project would be subject to the 2022 California Fire Code as adopted by Sections 11.04.080 and 11.04.085 of the Town's Municipal Code, as well as the standards in the project-specific Fire Management Plan,²⁵ which include (but are not limited to) standards and specifications related to vegetation removal, fire hydrant placement, interior roads and driveways, and regular reviews of on-site conditions.

Furthermore, as established by Section 12.24.010 of the Municipal Code, the Town requires new development projects to contribute fees for the provision of adequate community facilities at the time of building permit issuance, which would include fire and police protection service facilities. The proposed project would be subject to all applicable development impact fees. Revenues generated through impact fees on new development would pay for any new fire and police facilities deemed necessary by the Town, all of which would be required to be designed in compliance with applicable regulations and standards, and if necessary, undergo analysis of all potential environmental impacts under CEQA.

Therefore, impacts related to the need for new or physically altered fire or police protection facilities, the construction of which could cause significant environmental impacts, were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

c. The General Plan EIR concluded that with implementation of applicable General Plan policies and implementation measures, as well as applicable federal, State, and local development standards, implementation of the General Plan would result in a less-thansignificant impact to schools.

The proposed project would be subject to payment of all applicable development impact fees. Public education for future project residents would be provided by the Loomis Union School District (LUSD) for kindergarten through eighth grade and by Del Oro High School within the Placer Union High School District (PUHSD) for ninth through twelfth grade. Franklin Elementary School is located approximately 1.05 miles east of the site, and would most likely serve elementary school students living in the future residences.

According to the Town's General Plan EIR, LUSD enrollment is essentially equal to the existing capacity of the facilities, with some schools operating at or above the capacity limit. Based on LUSD's student-yield generation rate (0.46 students per residential unit), the General Plan EIR concluded that full buildout of the 2040 General Plan would generate approximately 460 new students. As the proposed project would be consistent with the site's existing General Plan land use designation, the nine LUSD students (20 units x 0.46 students per unit = 9.2 students) would have been a part of the anticipated student population. In addition, the General Plan EIR cites the recent expansion of Del Oro High School's capacity as adequate to ensure sufficient capacity for future students generated by buildout of the General Plan. As the proposed project and future single-family residences would be consistent with the existing General Plan land use designations, students generated by the proposed project would have been a part of the student population increase for Del Oro High School anticipated in the Town's General Plan.

In addition, future on-site residential development would be subject to all applicable impact fees to fund educational facilities, including the LUSD and PUHSD high school

²⁵ Premier Homes, LLC. *The Reserve Fire Management Plan.* August 28, 2025.

development impact fees, which would include \$3.10 per sf²⁶ and \$2.07 per sf,²⁷ respectively, for residential development. Payment of such fees would serve as the project's fair-share contribution for funding expanded educational services that could result from a student population increase generated by the project's future residents. Revenues generated through payment of the fees would ensure sufficient funds exist to pay for any expanded or new equipment or facilities the LUSD and PUHSD deem necessary. 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]). As such, payment of developer fees would be considered sufficient to reduce any potential impacts related to school services.

As discussed under Impact 4.13-4 of the Town's General Plan EIR. General Plan buildout d.e. would increase the demand for existing and new parks and recreation facilities. General Plan Policies PROS-1.1.1 and PROS-1.2.1 provide an approach for the adequate provision of parkland as the Town of Loomis grows, including the overall parkland standard of five acres of park and five acres of passive park or open space per 1,000 residents. In addition, General Plan implementation measures PROS-1.1.1.1 and PROS-1.1.1.2 establish framework by which the provision of parkland would be achieved and emphasize the provision of parks over payment of in-lieu fees. Implementation of the aforementioned General Plan policies and implementation measures would help provide additional parks, as well as fund the maintenance of existing parks, which would protect against overuse and potential deterioration of existing facilities. Nonetheless, even with compliance with all applicable General Plan policies, implementation measures, and General Plan EIR mitigation measures, buildout of the General Plan could increase the use of existing parks and recreation facilities, thereby resulting in the overuse and deterioration of such facilities. Therefore, the General Plan EIR determined that further mitigation is not feasible, and impacts related to the potential accelerated or substantial deterioration of existing parks and recreation facilities would be significant and unavoidable.

Development of the proposed project would result in an increase in demand for parks and other public facilities through the development of new residences. Using an average persons per household value of 3.02 per residential unit, the proposed project could generate a population of 61 persons. The Town's General Plan requires five acres of active parkland per 1,000 residents; therefore, the project would be required to provide 0.31-acre of parkland (0.005 acres x 61 people). The proposed project does not include a parkland dedication. Thus, the proposed project would include payment of fees consistent with Section 14.60.010 of the Municipal Code in lieu of dedicating parkland as part of the proposed development. In addition, Section 12.24.010 of the Municipal Code requires all new development within the Town to pay a parkland fee, including development with new dwelling units. Funds collected from the parkland fees are intended to allow the acquisition of land for town parks by the Town of Loomis. Payment of all applicable fees would be considered sufficient to ensure that adequate public parkland is provided as decided by the Town. Furthermore, the proposed project is consistent with the General Plan land use

Loomis Union School District. Developer Fees. Available at: https://www.loomisk8.org/123163_3. Accessed August 2025.

²⁷ Placer Union High School District. School Facility Fees (Developer Fees) as of July 1, 2024. July 2024.

designation for the site; as such, any associated increase in demand for parks and other public facilities was generally anticipated and analyzed in the General Plan EIR.

Based on the above, impacts related to the need for new or physically altered schools, parks, or other public facilities, the construction of which could cause significant environmental impacts, were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

	VI. RECREATION. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			×

a,b. As previously discussed, the General Plan EIR concluded that buildout of the General Plan would increase the demand for existing and new parks and recreation facilities. Although implementation of the applicable General Plan policies, implementation measures and General Plan EIR mitigation measures would help provide additional parks, as well as fund the maintenance of existing parks, buildout of the General Plan could increase the use of existing parks and recreation facilities, thereby resulting in the overuse and deterioration of such facilities. Therefore, the General Plan EIR determined that impacts related to the potential accelerated or substantial deterioration of existing parks and recreation facilities would be significant and unavoidable.

As discussed in Section XIV, Population and Housing, the proposed project would include 20 single-family residences, which is anticipated to include an increase in population of 61 residents. The increase in population could result in an associated increase in demand on recreational facilities such that substantial physical deterioration could occur or be accelerated, or that the additional demand could require the construction or expansion of such facilities.

Section 14.60.030 of the Town's Municipal Code indicates that the size of recreation and park facilities required as part of residential development is calculated by multiplying the number of proposed dwelling units by a factor of 0.0298 for single-family residences. Therefore, the proposed project would be required to dedicate approximately 0.6-acre of local recreation or park facilities. Because the proposed project would not include the dedication of parkland, the project would be subject to the payment of in-lieu fees as calculated consistent with Section 14.60.050 of the Town's Municipal Code. The payment of all applicable fees would ensure that adequate parkland be provided within the Town, and existing recreational facilities would not experience impacts due to increased population growth. In addition, the project site is located approximately 0.98 miles northeast of Sasaki Park, and 1.03-miles east of Monte Verde Park located within the City of Rocklin. The project site is also located in close proximity to Franklin Elementary School; consistent with the Town's General Plan EIR, the open space associated with LUSD school sites would help reduce demand for recreational facilities. In addition, the proposed residential lots would provide significant open-yard space, further decreasing the potential demand for parks by providing on-site passive recreational facilities. As such, future residents of the proposed project would have access to existing recreational facilities, thereby reducing any demand for parks associated with the increase in population due to the proposed project.

In addition, given that the proposed project would be consistent with the General Plan land use designation of the project site, any increase in population associated with project buildout, as well as the resulting increase in demand for parks and recreation facilities, has been anticipated and analyzed in the General Plan EIR.

Based on the above, impacts related to parks and recreation facilities were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

XVII. TRANSPORTATION. Would the project:		Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			×

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 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 of Land Use and Climate Innovation (LCI) 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, which 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, 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." See question 'b' for a discussion of VMT.

Pedestrian, Bicycle, and Transit Facilities

As discussed under Impact 4.14-1 of the General Plan EIR, development of the transportation network and circulation diagram changes outlined in the General Plan would not conflict with adopted programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. In addition, the General Plan includes policies, implementation measures, and transportation network improvements that would improve facilities for all modes of travel and promote increased use of pedestrian, bicycle, and transit facilities in the future. The new transportation improvements contained in the Town's circulation diagram would be constructed consistent with applicable design standards including the Town of Loomis Construction Standards and Development Manual, which are intended to provide for coordinated development of future Town facilities.

Overall, the transportation and circulation elements of the Town's General Plan have been designed to illustrate the Town's commitment to building a travel-efficient transportation network that supports all modes of travel, promotes increased non-vehicular travel,

encourages the development of complete and connected communities, and reduces trip lengths. Thus, the General Plan EIR determined that through compliance with all applicable General Plan policies and implementation measures, impacts related to conflicts with an existing program, plan, ordinance, or policy addressing the circulation system would be less than significant.

A Traffic Evaluation Analysis was prepared for the proposed project by Kimley-Horn (see Appendix G) to provide an assessment of the project's effect on the transportation network in the vicinity of the project site.²⁸

According to the Traffic Evaluation Analysis, sidewalks and other pedestrian facilities, including intersection crosswalks, do not currently exist in the vicinity of the project site. However, the Placer Countywide Active Transportation Plan is currently being developed. In addition, the proposed project would include pedestrian facility improvements, including a five-foot-wide sidewalk along the northern and eastern sides of the proposed internal roadway which would connect to a new five-foot-wide crushed granite trail along the Barton Road frontage of the project site, as well as a new five-foot-wide sidewalk along the southerly half-section of Rocklin Road along the northern project frontage. Given that the proposed project would provide adequate access for pedestrians, the proposed project would not conflict with a program, plan, or ordinance addressing pedestrian facilities.

As discussed in the Traffic Evaluation Analysis, bicycle facilities do not currently exist on the roadways proximate to the site. However, the Town of Loomis Bikeway Master Plan proposes Class II bicycle facilities along Rocklin Road and Class III bicycle facilities along Barton Road. In addition, the proposed project would include widening of the western half of Barton Road and the southernly half of Rocklin Road to accommodate space to stripe the future Class II bicycle facilities. Development of the proposed project would not preclude the construction of any planned bicycle facilities, and the proposed project would not alter the existing circulation system in a way that would conflict with any adopted programs, plans, ordinances, or policies addressing bicycle facilities.

Public transit service and countywide transportation planning for western Placer County is provided through Placer County Transit (PCT). According to the Traffic Evaluation Analysis, the nearest transit stop to the project site is located at the intersection of Rocklin Road and El Don Drive, approximately 1.4-mile west of the project driveway. The transit stop is served by Roseville Transit Route E fixed roue bus service which serves the Sierra College Campus, Roseville Galleria, and Sierra Gardens Transfer Point. Such services are provided at two-hour headways Monday through Friday. In addition, the Rocklin-Loomis Dial-A-Ride would serve the project site, offering Americans with Disabilities Act (ADA) Paratransit service to all destinations within the Town of Loomis, as well as the surrounding Cities.

According to the PCT Planning Agency's 2025/26 Annual Unmet Transit Needs Assessment, PCT's annual systemwide transit ridership reached 200,000 rides in the 2023/24 fiscal year. ²⁹ As such, a maximum increase of 61 new residents would represent a 0.031 percent increase in ridership. Such an increase would not be considered a substantial increase in transit demand; thus, any demand added to the transit system could be adequately accommodated by the existing/planned transit system. The proposed

Placer County Transit Planning Agency. Annual Unmet Transit Needs Assessment for Fiscal Year 2025/26. Adopted February 26, 2025.

Kimley Horn. The Reserve Traffic Evaluation. May 27, 2025.

project would also not result in substantial modification or the removal of any existing or planned transit facilities or preclude the implementation of any proposed or existing facilities in the project vicinity.

Furthermore, the proposed project is consistent with the project site's land use designation and would comply with all applicable policies established in the General Plan. As such, the proposed project has been considered generally in the General Plan EIR analysis, and would not conflict with any adopted programs, plans, ordinances, or policies addressing transit facilities.

Conclusion

Based on the above, impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. As discussed under Impact 4.14-2 of the General Plan EIR, buildout of the General Plan would result in the generation of residential and work VMT in excess of the 15 percent below baseline conditions significance threshold. The General Plan includes policies and implementation measures that would reduce environmental impacts, promote mobility options, and incentivize infill development. However, despite compliance with General Plan policies and implementation measures, the General Plan EIR determined that buildout of the General Plan would result in a potentially significant impact related to the generation of VMT above applicable thresholds. The General Plan EIR included Mitigation Measure 4-14.2, which would require the Town of Loomis to develop a VMT reduction program that would require proposed development projects that could have a potentially significant VMT impact to include measures that would reduce VMT effects in a manner consistent with state guidance on VMT reduction. However, even with implementation of Mitigation Measure 4-14.2, the effectiveness of such measures to reduce VMT to meet State goals cannot be demonstrated. Therefore, the General Plan EIR concluded that impacts related to the substantial generation of VMT would remain significant and unavoidable.

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. Determination of impacts based on VMT have been required by law Statewide since July 1, 2020.

Pursuant to Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. In addition, the Town of Loomis General Plan includes Policy CIR-3.2.2 which requires the Town to evaluate VMT impacts consistent with the requirements of CEQA and the recommendations of LCI Technical Advisory on Evaluation Transportation Impacts in CEQA. According to LCI and the Town of Loomis, a proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as Town VMT per capita.

According to the results of the Traffic Evaluation, the existing VMT per capita for the County is 22.53. Therefore, the Town recommended impact threshold of 15 percent below the County average VMT per capita equates to 19.15 VMT per capita. The results of the project specific VMT evaluation indicate that the proposed project is expected to produce 23.03 VMT per capita, which is in excess of the established threshold of 19.15 VMT per capita. However, the General Plan EIR determined that buildout of the General Plan would result in a significant and unavoidable impact. Therefore, the project would not result in an impact on the transportation system beyond what has been previously analyzed in the General Plan EIR. In addition, the proposed project would be required to comply with app applicable General Plan policies, implementation measures, and General Plan EIR Mitigation Measure 4.14-2 requirements, consistent with the analysis of the General Plan EIR.

Based on the above, the proposed project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). Furthermore, the proposed project is consistent with the General Plan land use designations for the site; as such, any associated VMT impacts were generally anticipated and analyzed in the General Plan EIR. As such, impacts were adequately addressed in the General Plan EIR, and effects peculiar to the proposed project would not occur, Thus, the proposed project would not require further CEQA review for this topic.

c,d. The Town's General Plan EIR evaluated hazardous design features or emergency access under Impacts 4.14.3 and 4.14.4. The General Plan EIR determined that all new land uses and transportation facilities developed under the General Plan would be designed and constructed according to the Town of Loomis Construction Standards and Town of Loomis Development Standards. As such, the General Plan EIR concluded that impacts resulting from potential opportunities for safety conflicts and potential conflicts with emergency access would be less than significant.

Site access would be provided by way of a new driveway along Barton Road in the eastern portion of the project site. As previously discussed, Kimley-Horn prepared a Traffic Evaluation for the proposed project, which includes an assessment of the project's effect on potential traffic hazards (see Appendix G). As part of the Traffic Evaluation, Kimley Horn conducted an access and safety evaluation. According to the Town's Local Road Safety Plan (LRSP) the intersection of Barton Road and Rocklin Road, located to the northeast of the project site, is considered a "high incident location" and the intersection of Barton Road and Wells Avenue, immediately east of the site, is considered a "location of note". However, because the proposed project would result in relatively few new daily trips within the local transportation network, the project would not significantly alter the existing safety conditions at the Barton Road and Rocklin Road intersection or the Barton Road and Wells Avenue intersection. Furthermore, the design of the project's internal roadways and connections to existing circulation systems would comply with the Town's design standards.

As part of the Traffic Evaluation, Kimley Horm also conducted a sight distance evaluation for the unsignalized site access driveway. The sight distance evaluation recorded corner sight distance (CSD) time gap measurements from the intersection of Barton Road and Wells Avenue to the proposed driveway. The sight distance evaluation determined that eastbound left-turn movements from the proposed driveway would have an average CSD time gap of 8.7 seconds, which exceeds the 7.5 second minimum CSD time gap as

³⁰ Kimley Horn. *The Reserve Traffic Evaluation*. May 27, 2025.

specified in Section 14.36.060 of the Municipal code. In addition, the sight distance evaluation determined that eastbound right-turn movements from the proposed driveway would have an average CSD time gap of 7.2 seconds, which exceeds the 6.5 second minimum CSD time gap as specified in the Municipal code. As such, the proposed project would satisfy the CSD requirements set forth in Section 14.36.060 of the Municipal code. Furthermore, the proposed driveway would be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles could see pedestrians, bicycles, or vehicles in the area. Any landscaping and signage would be located in such a way to ensure an unobstructed view for drivers exiting the site.

In addition, adequate access would be provided for emergency vehicles and trucks to enter and exit the site and maneuver through the cul-de-sac. Primary site access and emergency vehicle access would be provided by the new private cul-de-sac (Reserve Court) along Barton Road. The cul-de-sac would be adequately sized to accommodate an emergency vehicle and would be constructed in accordance with the Town standards to ensure adequate sight distance, stopping distances, and other components to ensure public safety.

Construction traffic associated with the proposed project would include heavy-duty vehicles which would share the area roadways with normal vehicle traffic, as well as transport of construction materials, and daily construction employee trips to and from the site. However, such heavy-duty truck traffic would only occur throughout the duration of construction activities and would cease upon buildout of the proposed residential subdivision.

Furthermore, General Plan Policy CIR-2.1.1 requires roadway improvements within the Town to conform to the classification system and improvement standards specified in the Town of Loomis Construction Improvement Standards and Land Development Manual. According to the Town of Loomis Construction Standards, a construction traffic control plan is required for all lane closures, detours, and street closures and the Town Engineer shall approve said plan prior to start of construction. All work performed during construction would be required to conform to the conditions and requirements of the traffic control plan. The plan would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan must conform to the Caltrans Manual of Traffic Controls for Construction and Maintenance of Work Zones. 32

Given that the proposed project would be consistent with the site's General Plan land use designations, buildout of the project site and the potential for associated roadway design hazards has been anticipated by the Town and analyzed in the General Plan EIR. In addition, all roadway/circulation system improvements included in the proposed project would be consistent with applicable Town engineering standards. Thus, the proposed project would not require further CEQA review for this topic.

Based on the above, impacts related to substantially increasing hazards due to design features or incompatible uses would be less than significant, and effects peculiar to the proposed project would not occur. Thus, the proposed project would not require further CEQA review for this topic.

³² California Department of Transportation. *Work Zone Traffic Control Resources*. Available at: https://dot.ca.gov/programs/safety-programs/workzones. Accessed August 2025.

Town of Loomis. Town of Loomis Construction Standards. March 2004. Adopted June 8, 2004.

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:

Significant Impact Peculiar to the Project or the Project Site

Significant Impact due to New Information Impact Adequately Addressed in the General Plan EIR

- 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. The General Plan EIR determined that compliance with the General Plan policies, along with implementing measures intended to protect tribal cultural resources, would reduce the significance of impacts to tribal cultural resources. However, because feasible mitigation to guarantee that the loss, damage, or destruction of tribal cultural resources listed or eligible for listing as significant does not exist, the General Plan EIR concluded that buildout of the General Plan would result in a significant and unavoidable impact.

AB 52 (PRC Section 21080.3.1) notification to tribes is not required for the proposed project, given that this checklist determines no additional environmental review is required for the project, consistent with CEQA Guidelines Section 15183. In addition, the Cultural Resources Investigation prepared for the proposed project included a SLF search from the NAHC, which returned negative results, indicating that known sensitive tribal cultural resources are not present within the project site or vicinity.

Given that the proposed project would be consistent with the site's General Plan land use designation, buildout of the project site and potential disturbance of buried tribal cultural resources has been anticipated by the Town and analyzed in the General Plan EIR. In addition, as previously discussed, pursuant to CEQA Guidelines Section 15183(f), "An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. [...]" In the case of the proposed project, compliance with General Plan policies implementation measures, and existing regulations, such as Policy H-1.1.1, Policy H-1.2.1, Implementation Measure H-1.1.2, Policy H-1.1.5, Implementation Measures H-1.1.5.1 through H-1.1.5.3, California Health and Safety Code Section 7050.5 and 7052, and PRC Section 5097, would help avoid impacts to tribal cultural resources.

Based on the above, the proposed project is not expected to adversely impact tribal cultural resources. Therefore, impacts related to resulting in a substantial adverse change in the significance of a tribal cultural resource were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

	X. UTILITIES AND SERVICE SYSTEMS. build the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			*

Water services for the proposed project would be provided by the PCWA. As part of the proposed project, a new eight-inch water line would be installed within the proposed roadway and would extend to connect to the existing 12-inch water line located in Barton Road, east of the project site. Sewer services for the proposed project would be provided by SPMUD. The proposed project would include installation of a six-inch gravity sewer line within the internal roadway, from lots 7 and 16 to Barton Road, that would connect to existing six- and eight-inch sanitary sewer lines within Barton Road, east of the project site. Lots 8 through 15 would use individual grinder pumps and 2.5-inch force mains to convey wastewater to the proposed six-inch gravity line at the termination manhole within the internal roadway. Stormwater runoff from the project site would be captured and discharged from 14 DMAs into four drainage swales as shown in Figure 7. Treated runoff would exit the swales and flow downgrade into the on-site pond in the southwest portion of the project site. Electricity and telecommunications utilities would be provided by way of connections to existing infrastructure located within the immediate project vicinity. Therefore, the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, or other utility infrastructure would not be required. In addition, the proposed project would be subject to General Plan policies related to utility services, including Policies PSF-1.1.1 and PSF-1.1.2, as well as Implementation Measure PSF-1.4.1.2. Furthermore, because the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated utility improvements have been analyzed in the General Plan EIR. According to the General Plan EIR, with implementation of General Plan policies and implementation measures, impacts related to the construction or expansion of water, wastewater, storm drainage, electric, or telecommunications facilities or infrastructure would be less than significant.

Based on the above, impacts related to 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, were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

b. Water service to the project site would be provided by PCWA. The project site would connect to an existing 12-inch water line within Barton Road, to the east of the project site. To meet the Town's water demand, the Town uses surface water from the American river and Canyon Creek, and groundwater pumped from groundwater sources within western Placer County. According to the PCWA UWMP, PCWA is projected to have sufficient water supply to meet the projected demand through 2045 even after multiple dry years. The proposed project would be subject to pay Development Impact Fees pursuant to Chapter 12.24 of the Municipal Code.

According to Impact 4.15-2 of the General Plan EIR, potential impacts related to adequate water supplies would be less than significant and water supplies for the Town would meet expected demand for normal year, single-dry year, and multiple-dry year scenarios through 2045. Furthermore, the Town's General Plan encourages efficient water use (Policy PSF-1.4.2) and requires new development to secure adequate water service (Implementation Measure PSF-1.4.1.1). In addition, the proposed project would be subject to water conservation requirements to reduce indoor demand for potable water in accordance with the current version of the CALGreen Code and the requirements related to the reduction of landscaping water demand established in Chapter 13.34 of the Town's Municipal Code, as well as all applicable development impact fees related to water supply service. Compliance with such requirements would further reduce any potential impacts associated with increased demand for water.

Given that the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated water use has been analyzed in the General Plan EIR. Impacts related to sufficient water supplies being available to serve the project and reasonably foreseeable future development were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

c. Sanitary sewer services would be provided to the project site by SPMUD, the Town's wastewater provider. The SPMUD sewer collection system is comprised of approximately 290 miles of gravity sewer main, seven miles of sewer force main, 122 miles of lower laterals, 13 sewer lift stations, and 11 permanent flow recorder stations throughout a 31-square-mile service area.³⁴ SPMUD conveys wastewater to two WWTPs: the Dry Creek WWTP, located in the southern end of the City of Roseville, or the Pleasant Grove WWTP, located in the western portion of the City of Roseville. According to the Town's General Plan EIR, all wastewater from the Town is ultimately conveyed to the Dry Creek WWTP for treatment.

³³ Water Systems Consultants, Inc. Placer County Water Agency 2020 Urban Water Management Plan. June 2021.

³⁴ South Placer Municipal Utility District. *Strategic Plan* 2023-2027. September 2022.

As discussed under Impact 4.15-3 of the General Plan EIR, adequate capacity exists to serve buildout of the General Plan planning area, and impacts related to wastewater treatment capacity would be less than significant. In addition, all applicable impact fees would be required to be paid prior to issuance of a building permit and would further reduce any potential impacts associated with increased demand for wastewater service. Given that the proposed project is consistent with the site's current land use designation, the type and intensity of growth that would be induced by the proposed project was generally considered in the General Plan and associated wastewater demand has been analyzed in the General Plan EIR. Therefore, the proposed project would not generate wastewater flows beyond the capacity of existing wastewater treatment facilities or planned future improvements to such facilities.

Based on the above, the availability of adequate capacity to serve the wastewater demand projected for the proposed project in addition to the Town's existing commitments was adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

d,e. The Auburn Placer Disposal Service would be responsible for maintaining waste management for residents of the proposed project. Solid waste generated by the project would be disposed of at the Western Regional Landfill. The Western Regional Landfill covers 281 acres of land; 231 acres are permitted for disposal. The site's permit allows the landfill to receive a maximum of 1,900 tons of waste per day. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Western Regional Landfill has a remaining capacity of 29,093,819 cubic yards out of a total permitted capacity of 36,350,000, or 80 percent remaining capacity.³⁵ As such, the Western Regional Landfill would have adequate capacity for the solid waste generated by the proposed project. In addition, during project construction, as required by CBSC Section 4.408, the proposed project would be required to submit a Waste Management Plan to the Town detailing on-site sorting of construction debris. Implementation of the Waste Management Plan would ensure that the proposed project meets established diversion requirements for reused or recycled construction waste.

The Town's General Plan EIR concluded that adequate capacity at local landfills exists to serve full buildout of the General Plan. Considering such existing capacity, as well as implementation of General Plan policies that would promote long-term reduction of solid waste generation in the General Plan planning area, the General Plan EIR concluded that impacts would be less than significant.

The proposed project is consistent with the General Plan land use designation and zoning of the project site, and therefore, the associated increase in solid waste disposal needs associated with development of the site was generally considered in the EIR analysis. Therefore, 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.

California Department of Resources Recycling and Recovery (CalRecycle). Facility/Site Summary Details: Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2542?siteID=2273. Accessed August 2025.

Based on the above, impacts related to solid waste were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review related to such.

cla	WILDFIRE. cocated in or near state responsibility areas or lands assified as very high fire hazard severity zones, and the project:	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			×

a-d. As discussed in the General Plan EIR, portions of the Town are located in areas susceptible to risk of wildfires. According to the Town's General Plan EIR, buildout of the General Plan would include construction and operation of new residential, commercial, and industrial uses in areas considered by the Town of Loomis and CAL FIRE as moderate and high fire hazard severity zones. However, the General Plan EIR determined that wildfire risks associated with such land use changes would be offset with adoption and implementation of the appropriate General Plan policies and implementation measures, as well as compliance with existing fire safety regulations. In addition, Implementation Measure PHS-2.1.5.1 of the General Plan EIR requires new development include a wildland fire protection plan demonstrating that vegetation clearance will be maintained around structures while preserving oak trees, as part of the application materials for residential subdivisions proposed within or near oak woodlands. As discussed throughout this Modified Initial Study, the projected site consists of mostly undeveloped, lightly forested land. As such, a FMP was prepared for the proposed project by Premier Homes LLC. (see Appendix E)³⁶ The FMP includes recommendations related to vegetation modification, building materials, and community design, including the implementation of fire breaks and use of fire-resistant materials, which would reduce the intensity, spread, and number of fires in the project vicinity. Overall, the General Plan EIR concluded that compliance with the recommendations set forth in the FMP, relevant fire safety and wildfire suppression regulations, and the applicable General Plan policies would reduce risks associated with wildfires to a less-than-significant level.

In addition, according to the CALFIRE Fire and Resource Assessment Program, the project site is not located within a Very High FHSZ.³⁷ The proposed project would be located near existing roads and other utilities that would help reduce risks related to wildfire. Urban and residential development surrounding the project site would further

Premier Homes LLC. *The Reserve Fire Management Plan.* April 18, 2025.

³⁷ California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones in State Responsibility Area*. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed July 2025.

reduce risks related to wildfire. Due to a lack of natural debris and green waste, such surrounding developments would act as a fuel break within developed sites. Given that the existing development area in the vicinity of the project site would provide a wildfire buffer and the project site is situated adjacent to existing roads, water lines, and other utilities, the potential for wildland fires to reach the project site would be low. Furthermore, the proposed project would be required to comply with all applicable requirements of the CFC, as adopted by Sections 11.04.080 and 11.04.085 of the Town's Municipal Code, including installation of fire sprinkler systems. Additionally, the CBSC includes requirements related to fire hazards for new buildings. Such features would help to reduce the spread of fire. Lastly, as discussed in Section VII, Geology and Soils, and Section X, Hydrology and Water Quality, of this Modified Initial Study, development of the proposed project would not expose people or structures to significant risks related to flooding or landslides. Given that the proposed project is consistent with the site's General Plan land use designations, risk of loss, injury, or death involving wildland fires has been anticipated and analyzed in the General Plan EIR.

Based on the above, the site would not be subject to any peculiar hazards related to wildfire risk as compared to the General Plan EIR. Thus, the criteria for requiring further CEQA review are not met.

XX	(I. MANDATORY FINDINGS OF SIGNIFICANCE.	Significant Impact Peculiar to the Project or the Project Site	Significant Impact due to New Information	Impact Adequately Addressed in the General Plan EIR
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?			*

a. As discussed in Section IV, Biological Resources, of this Modified Initial Study, the proposed project would not adversely impact special-status plant or wildlife species. The proposed project would be required to comply with applicable General Plan policies, implementation measures, and General Plan EIR mitigation measures related to effects on any special-status plant and wildlife species and protected aquatic features or wetlands, including pre-construction surveys. In addition, as discussed in Sections V and XVIII, Cultural Resources and Tribal Cultural Resources, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic, archaeological, or tribal cultural resources. The proposed project would be required to comply with applicable General Plan policies, as well as all applicable State regulations, related to preservation of archaeological resources and human remains if such resources are discovered within the project site during construction activities, consistent with the requirements of CEQA.

Considering the above, the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Impacts associated with such resources have been adequately addressed and would not change from what was identified in the General Plan EIR, and the criteria for requiring further CEQA review are not met.

b. The proposed project, in conjunction with other development within the Town of Loomis, could incrementally contribute to cumulative impacts in the area. However, the proposed project was included in the future development assumptions evaluated in the General Plan EIR. The General Plan EIR concluded that cumulative impacts to aesthetics and visual resources, air quality, cultural and tribal cultural resources, greenhouse gas emissions, public services and recreation, and transportation would be significant and unavoidable. For those impacts determined to be significant in a General Plan EIR, CEQA Section

15183 allows for future environmental documents to limit examination of environmental effects to those impacts which were not already analyzed as a significant effect in the prior EIR, provided that the proposed project is consistent with the General Plan. Given that the proposed project is consistent with the Town's General Plan land use designation for the project site, cumulative impacts associated with buildout of the site have been anticipated by the Town and were analyzed in the General Plan EIR. Cumulative effects peculiar to the project or project site do not exist. Additionally, the proposed project does not incrementally contribute to cumulative impacts that were not analyzed or discussed in the Town's General Plan EIR. Furthermore, as discussed throughout this Modified Initial Study, all impacts associated with the proposed project were adequately addressed in the General Plan EIR, and the proposed project would not result in any peculiar effects that would require further CEQA review. As such, this Modified Initial Study does not include any substantial new information that shows impacts are more severe than previously discussed, and further analysis is not required.

c. As described in this Modified Initial Study, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local, County and State regulations. In addition, as discussed in the Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise sections of this Modified Initial Study, the proposed project would not cause substantial adverse effects to human beings, including effects related to exposure to air pollutants, geologic hazards, hazardous materials, and excessive noise, beyond the effects previously analyzed as part of the General Plan EIR. Therefore, further CEQA review is not required.

APPENDIX A

BIOLOGICAL RESOURCES ASSESSMENT



Biological Resources Assessment

The Reserve

Town of Loomis, Placer County, California September 2025

Prepared for: Premier Homes, LLC 8483 Douglas Plaza Dr. Granite Bay, CA 95746 **Recommended Citation:**

Madrone Ecological Consulting, LLC (Madrone). 2025. Biological Resources Assessment for The Reserve.

Prepared for Premier Homes, LLC. Published on 12September 2025.

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Attachment A. IPaC Trust Resource Report for the Study Area

Attachment B. CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment C. The Reserve Wildlife List

Attachment D. Approved Jurisdictional Determination for The Reserve

Attachment E. Tree Inventory Map

1.0 INTRODUCTION

This report presents the results of a Biological Resources Assessment conducted for The Reserve Property (Study Area), which was formerly known as the Premier Montair Property. The approximately 26.5-acre Study Area is located south of Rocklin Road and west of Barton Road in the Town of Loomis, Placer County, California. The Study Area is located in a portion of Section 21, Township 11 North, Range 7 East (MDB&M) of the "Rocklin, California" 7.5-Minute Series USGS Topographic Quadrangle (USGS 2021) at a Latitude 38.786425, Longitude -121.194851 (Figure 1).

1.1 Project Description

The project proposed within the Study Area is a residential subdivision located in the Town of Loomis (Town) (**Figure 2**). The subdivision will include 20 single-family residential lots and related infrastructure and frontage improvements. All single-family lots will be zoned Rural Residential and are intended to be used for single-family residences, associated auxiliary buildings and accessory dwelling units. The Project applicant also proposes a front-setback variance to help protect existing natural resources (i.e., trees) in select locations within the future backyards of the lots.

2.0 REGULATORY SETTING

This section describes federal, state and local laws and policies that are relevant to this biological resources assessment.

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects species that are federally listed as endangered or threatened with extinction. FESA prohibits the unauthorized "take" of listed wildlife species. Take includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such activities. Harm includes significant modifications or degradations of habitats that may cause death or injury to protected species by impairing their behavioral patterns. Harassment includes disruption of normal behavior patterns that may result in injury to or mortality of protected species. Civil or criminal penalties can be levied against persons convicted of unauthorized "take." In addition, FESA prohibits malicious damage or destruction of listed plant species on federal lands or in association with federal actions, and the removal, cutting, digging up, damage, or destruction of listed plant species in violation of state law. FESA does not afford any protections to federally listed plant species that are not also included on a state endangered species list on private lands with no associated federal action.

2.1.2 Clean Water Act, Section 404

Section 404 of the Federal Clean Water Act requires that a Department of the Army permit be issued prior to the discharge of dredged or fill material into waters of the United States (U.S.), including some wetlands. The U.S. Army Corps of Engineers (USACE) administers this program, with oversight from the U.S. Environmental Protection Agency. As of the date of this document, waters of the U.S. are defined as follows (40 CFR 120.2):

1. Waters which are:

- i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- ii. The territorial seas; or
- iii. Interstate waters;
- 2. Impoundments of waters otherwise defined as waters of the U.S. under this definition, other than impoundments of waters identified under item (5) below;
- 3. Tributaries of waters identified in items (1) or (2) above that are relatively permanent, standing or continuously flowing bodies of water;
- 4. Wetlands adjacent to the following waters:
 - i. Waters identified in item (1) of this section; or
 - ii. Relatively permanent, standing or continuously flowing bodies of water identified in items (2) or (3) above and with a continuous surface connection to those waters;
- 5. Intrastate lakes and ponds not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items (1) or (3) above.

Under the current definition of waters of the U.S., "adjacent" means having a continuous surface connection.

Waters of the U.S. subject to regulation under Section 404 are referred to as "jurisdictional waters".

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any native migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11). Likewise, Section 3513 of the California Fish & Game Code prohibits the "take or possession" of any migratory non-game bird identified under the Migratory Bird Treaty Act. Therefore, activities that may result in the injury or mortality of native migratory birds, including eggs and nestlings, would be prohibited under the Migratory Bird Treaty Act.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (as amended) provides for the protection of bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter,

transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit [16 USC 668(a); 50 CFR 22]. The U.S. Fish and Wildlife Service (USFWS) may authorize take of bald eagles and golden eagles for activities where the take is associated with, but not the purpose of, the activity and cannot practicably be avoided (50 CFR 22.26).

2.2 State Regulations

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires evaluations of project effects on biological resources. Determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife (CDFW) or USFWS (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the California Department of Fish and Game (2009) as Species of Special Concern;
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by the CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the Clean Water Act (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g., tree preservation policies); and
- Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

2.2.2 State Endangered Species Act

With limited exceptions, the California Endangered Species Act (CESA) of 1984 protects state-designated endangered and threatened species in a way similar to FESA. For projects on private property (i.e., that for which a state agency is not a lead agency), CESA enables the CDFW to authorize take of a listed species that is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code Section 2081).

2.2.3 California Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the FESA and CESA. Lists of Fully Protected Species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most Fully Protected Species have since been listed as threatened or endangered under FESA and/or CESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code, § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish) provide that Fully Protected Species may not be taken or possessed at any time. Furthermore, the CDFW prohibits any state agency from issuing incidental take permits for Fully Protected Species. The CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.4 California Species of Special Concern

The Species of Special Concern are defined by the CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under FESA or CESA or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role.
- The species is listed as federally (but not state) threatened or endangered or meets the state definition of threatened or endangered but has not formally been listed.
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status.
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

Species of Special Concern are typically associated with habitats that are threatened. Project-related impacts to Species of Special Concern, state-threatened or endangered species are considered "significant" under CEQA.

2.2.5 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying the CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.2.6 Clean Water Act, Section 401

Section 401 of the Clean Water Act requires any applicant for a 404 permit in support of activities that may result in any discharge into waters of the U.S. to obtain a water quality certification with the Regional Water Quality Control Board (RWQCB). This program is meant to protect these waters and wetlands by ensuring that waste discharged into them meets state water quality standards. Because the water quality certification program is triggered by the need for a Section 404 permit (and both programs are a part of the Clean Water Act), the definition of waters of the U.S. under Section 401 is the same as that used by the USACE under Section 404.

2.2.7 California Water Code, Porter-Cologne Act

Waters that are not considered waters of the U.S. may be considered waters of the State of California (waters of the State) under the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne, from Division 7 of the California Water Code, requires any person discharging waste or proposing to discharge waste that could affect the quality of waters of the state to file a report of waste discharge (RWD) with the RWQCB. The RWQCB can waive the filing of a report, but once a report is filed, the RWQCB must either waive or adopt Waste Discharge Requirements (WDR). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state of California.

2.2.8 California Fish and Game Code, Section 1600 – Streambed and Lake Alteration

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602, requires notification to the CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

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

For the purposes of Section 1602, rivers, streams, and lakes includes those that are dry for periods of time as well as those that flow year round. If notification is required and the CDFW believes the proposed activity is likely to substantially adversely affect fish and wildlife resources, it will require that the parties enter into a Lake or Streambed Alteration Agreement.

2.2.9 California Fish and Game Code, Section 3503.5 – Raptor Nests

Section 3503.5 of the Fish and Game Code makes it unlawful to take, possess, or destroy hawks or owls, unless permitted to do so, or to destroy the nest or eggs of any hawk or owl.

2.2.10 California Fish and Game Code, Section 3511, 4700, 5050, and 5515 – Fully Protected Species

California Fish and Game Code identifies "Fully Protected Species" in sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish). The state initially identified Fully Protected Species in the 1960s to identify and provide additional protection to animals that were rare or faced possible extinction. Subsequent passage of CESA has offered additional protection to some Fully Protected Species.

Fully Protected Species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research, relocation of the bird species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan.

2.3 Local Regulations

2.3.1 Town of Loomis Tree Conservation Ordinance

Chapter 13.54 of the Town of Loomis Municipal Code titled "Tree Conservation" (Town of Loomis 2025) (Tree Ordinance) regulates the removal and preservation of trees within the Town boundaries. The highest priority of the Tree Ordinance is to maximize the preservation of existing protected trees. As defined by the Tree Ordinance, a "Protected Tree" includes any native oak tree with a trunk that is a minimum of 6 inches in diameter as measured at breast height (DBH) for interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and oracle oak (hybrid of *Quercus kelloggii* and *Quercus wislizeni*) and 4 inches DBH for blue oak (*Quercus douglasii*); any oak tree with multiple trunks that have an aggregate DBH of at least 10 inches, or any heritage tree (defined as any tree identified by Town Council resolution).

Each Protected Tree has a "Critical Root Zone" which is a circle equal to the largest radius of a Protected Tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the Protected Tree's dripline. The Tree Ordinance requires a tree permit for the removal of a Protected Tree or any activity within the Critical Root Zone of a Protected Tree related to a discretionary project, unless otherwise exempted.

2.3.2 Town of Loomis General Plan Conservation Element

The Town of Loomis General Plan 2020-2040 (Town of Loomis 2024) contains policies governing conservation of resources within its jurisdiction. The applicable policies for Biological Resources are generally summarized below with more detailed measures outlined in the full General Plan document.

Policy BIO-1.1.1: The Town will actively encourage the preservation of vegetation communities that provide habitat for sensitive plant and wildlife species.

Policy BIO-1.2.1: The Town will require projects to avoid or minimize direct and indirect impacts to streams and associated riparian habitats to the maximum extent feasible.

Policy BIO-1.2.2: The Town will prohibit grading activities during the rainy season (approximately November-March), unless adequately mitigated to avoid sedimentation of streams and damage to riparian areas.

Policy BIO-1.3.1: Aquatic resources, including wetlands, shall be preserved whenever feasible. Appropriate mitigation approved by the Town and applicable regulatory agencies shall be implemented when direct or indirect impacts to aquatic resources cannot be avoided.

Policy BIO-1.4.1: Oak woodland and trees subject to the Town Tree Ordinance will be preserved and protected.

Policy BIO-1.4.2: The Town will require the preservation, replacement, and expansion of tree canopy within Town limits, provided adequate planting space is available. Such preservation, replacement, and expansion shall be undertaken in accordance with good forestry practices and in a manner that protects public health and safety.

3.0 METHODOLOGY

3.1 Literature Review

A list of special-status species with potential to occur within the Study Area was developed by conducting a query of the following databases:

- California Natural Diversity Database (CNDDB) (CNDDB 2025) query of the Study Area and all areas within 5 miles of the Study Area (Figures 3 and 4);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2025) query for the Study Area (Attachment A);
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (CNPS 2025a) query of the "Rocklin, California" quadrangle map, and the eight surrounding quadrangle maps (Attachment B;
- The Calflora Database (Calflora 2025);
- California Consortium of Herbaria Database (CCH1 Portal 2025);
- Western Bat Working Group (WBWG) Priority Matrices (WBWG 2025a);
- The Cornell Laboratory's eBird Database (eBird 2025);
- The Western Monarch Milkweed Mapper Database (WMMM 2025);
- The Xerces Society's Bee Watch Database (Xerces Society et al. 2025); and
- The iNaturalist Database (iNaturalist 2025).

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the Study Area.

For the purposes of this Biological Resources Assessment, special-status species are defined as those species that are:

- listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service;
- listed as threatened or endangered and candidates for listing by the CDFW;
- identified as Fully Protected Species or Species of Special Concern by the CDFW;
- identified as Medium or High priority species by the WBWG (WBWG 2025); and
- plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW [California Rare Plant Rank (CRPR) 1, 2, and 3]:
 - o CRPR 1A: Plants presumed extinct.
 - o CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
 - o CRPR 2A: Plants extirpated in California, but common elsewhere.
 - o CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
 - o CRPR 3: Plants about which the CNPS needs more information a review list.

3.2 Field Surveys

Madrone senior biologist Bonnie Peterson and Tara Collins conducted field surveys of various portions of the Study Area on 23 August and 7 October 2022, 2 May and 27 June 2023, and 18 March 2025 to identify and map aquatic resources and assess the suitability of habitats onsite to support special-status species. Meandering pedestrian surveys were performed on foot throughout the Study Area. Vegetation communities were classified in accordance with *Manual of California Vegetation, Second Edition* as updated online (CNPS 2025), and plant taxonomy was based on the nomenclature in the Jepson eFlora (Jepson Flora Project 2025). A list of all wildlife species observed during field surveys is included as **Attachment C**.

The results of several additional surveys were also incorporated into this report:

- Dry season sampling for federally listed large branchiopods conducted throughout the Study Area (Helm 2010);
- An aquatic resources delineation conducted by Madrone throughout the Study Area (Madrone 2022);
- Special-status plant surveys conducted by Madrone throughout the Study Area (Madrone 2023); and
- Arborist surveys conducted by California Tree and Landscaping Consulting, Inc. (CalTLC) conducted within the Study Area (CalTLC 2022).

4.0 EXISTING CONDITIONS

The Study Area occurs within Assessor Parcel Numbers (APNs) 045-161-033-000 and 045-161-034-000. The Study Area is situated on rolling terrain at an average elevation of approximately 350 feet above mean sea level to about 405 feet above mean sea level. The site drains to a large perennial pond on the southwest corner, which appears to have been manmade. A portion of Rocklin Road runs east-west along the northern portion of the Study Area, and Barton Road runs north-south along a portion of the east edge of the Study

Area. The Study Area includes a single-family residence on Rocklin Road. The surrounding lands in general represent a mix of rural, agricultural, and residential developments.

4.1 Terrestrial Vegetation Communities

Three terrestrial vegetation communities occur within the Study Are (**Figure 5**) and are described further below. The Study Area lies within the northern Sierra Valley Foothills California floristic province ecoregion (Jepson Flora Project 2025).

4.1.1 Rural Residential-Developed

One rural residence and portions of Rocklin Road and Barton Road occur within the Survey Area; these areas are considered rural residential-developed and total approximately 1.4 acres. The private residence lies off of Rocklin Road and includes a house with fenced front and back yards, a paved driveway/parking area, shed, and intensive landscaping. The driveways and parking area are largely unvegetated, with areas around the house supporting maintained landscaping including a regularly mowed lawn area, Italian cypress (*Cupressus sempervirens*), crepe myrtle (*Lagerstroemia* sp.), and ornamental roses (*Rosa* spp.). A portion of Rocklin Road, a paved two-lane road, runs east-west along the northern edge of the Survey Area, and a portion of Barton Road, a paved two-lane road, runs north-south along the eastern edge of the Survey Area.

4.1.2 Annual Brome Grassland

The northwestern portion of the Study Area meets the definition of disturbed annual brome grassland (CNPS 2025b). This vegetation community is dominated by soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), yellow star-thistle (*Centaurea solstitialis*), bristly dogtail grass (*Cynosurus echinatus*), Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), winter vetch (*Vicia villosa*), and smooth cat's-ear (*Hypochaeris glabra*). Other species commonly occurring in this community within the Study Area include filaree (*Erodium botrys*), elegant clarkia (*Clarkia unguiculata*), hairy hawkbit (*Leontodon saxatilis*), slender wild oat (*Avena barbata*), ryegrass (*Festuca perennis*), rose clover (*Trifolium hirtum*), and goose grass (*Galium aparine*). This non-native annual grassland community also dominates the understory of the oak woodland. A couple scattered valley oaks and live oaks, as well as some planted fruit trees, occur in this area.

4.1.3 Mixed Oak Forest and Woodland

The remaining non-aquatic portions of the Study area support a vegetation community that meets the definition of mixed oak forest and woodland alliance (CNPS 2025b). The overstory of this terrestrial vegetation community is dominated by interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), and grey pine (*Pinus sabiniana*). A number of shrubs and other perennials occur in the understory, including western poison oak (*Toxicodendron diversilobum*), California coffee berry (*Frangula californica*), Armenian blackberry (*Rubus armeniacus*), chaparral honeysuckle (*Lonicera interrupta*), and bindweed (*Convolvulus*)

arvensis). The herbaceous understory is largely similar to the disturbed annual brome grassland described above.

4.2 Aquatic Resources

A protocol-level aquatic resources delineation was conducted in 2022 which included the majority of the Study Area (Madrone 2022). The USACE issued a preliminary jurisdictional determination for this delineation on 28 February 2023 (USACE 2023) (Attachment D). A small sliver of the Study Area was not included in the 2022 delineation; however, this area contains a segment of Barton Road, a paved two-lane road, and does not contain any aquatic resources.

A total of 5.06 acres of aquatic resources were delineated within the Study Area (**Figure 5**) and are displayed by type in **Table 1** below. The various aquatic resources mapped within the Study Area are described below.

Table 1. Aquatic Resources Mapped within the Study Area

Aquatic Resource Type	Acreage ¹		
Wetlands			
Seasonal Wetland	0.03		
Seasonal Wetland Swale	0.35		
Seep	0.08		
Subtotal	<u>0.46</u>		
Other Waters			
Pond	4.60		
Subtotal	<u>4.60</u>		
Total	5.06		

¹ Summation errors may occur due to rounding.

4.2.1 Seasonal Wetland

Three seasonal wetlands were delineated within the Study Area. Seasonal wetlands are depressional wetlands that pond water seasonally. Within the Study Area the seasonal wetlands are hydrologically driven by rainfall and fall within shallow depressions that lack sufficient flow to be characterized as seasonal wetland swales. Within the Study Area, these are relatively shallow features that are occupied by a mix of facultative and wetland plant species in topographic low points. Plant species commonly observed in seasonal wetlands within the Study Area include rye grass (*Festuca perennis*), green dock (*Rumex conglomeratus*), iris-leaved rush (*Juncus xiphioides*), Baltic rush (*Juncus balticus*), and Mediterranean barley (*Hordeum marinum*).

4.2.2 Seasonal Wetland Swale

Four seasonal wetland swales were delineated within the Study Area. Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff, and may detain it for short periods of time. Within the

Study Area the seasonal wetland swales contained undefined grass-dominated portions which were interspersed with eroded sections with a distinct bed and bank. Dominant plant species within the seasonal wetland swales include rye grass, annual rabbitfoot grass (*Polypogon monspeliensis*), common velvet grass (*Holcus lanatus*), and green dock. Other species commonly observed in these features within the Study Area include western goldenrod (*Euthamia occidentalis*), tall nutsedge (*Cyperus eragrostis*), cattail (*Typha* sp.), Italian thistle (*Carduus pycnocephalus*), and Armenian blackberry. All four seasonal wetland swales appear to be natural drainage features that convey seasonal runoff from upslope of the Study Area into the pond.

4.2.3 Seep

One seep was delineated within the northwestern portion of the Study Area. Seeps are wetlands that occur on slopes and receive hydrology almost exclusively from subsurface flow or groundwater as differentiated from the seasonal wetlands with precipitation driven surface hydrology. Dominant plant species in the seep within the Study Area includes a Goodding's black willow (*Salix gooddingii*), iris-leaved rush, Baltic rush, common velvet grass, and Armenian blackberry. A berm or old stockpile is located south of the seep and the seep is hydrologically isolated from the pond to the south.

4.2.4 Pond

One perennial pond with adjacent wetlands was delineated in the southwest corner of the Study Area. Adjacent wetlands mapped within the pond appear to seasonally inundate during wetter times of the year when the water level of the pond is at its highest. For the purpose of the 2022 aquatic resources delineation, wetlands adjacent to the pond were differentiated from seasonal wetlands and seasonal wetland swales that drain directly into the pond because they are influenced by backwater flooding from the pond. Willows (Salix spp.), Fremont cottonwood (Populus fremontii), soft rush (Juncus effusus), swamp prickle grass (Crypsis schoenoides), rabbitfoot grass, water primrose (Ludwigia peploides), northern water plantain (Alisma triviale), brome fescue (Festuca bromoides), tall nutsedge, willow herb (Epilobium densiflorum), slender willow herb (Epilobium ciliatum), western goldenrod, cattail, and Armenian blackberry represent some of the observed wetland plant species within these aquatic resources. Seasonally, the open water portion of the pond is covered with mosquito fern (Azolla filiculoides) and duckweed (Lemna sp.).

The pond is a human-induced feature which first appears on the 1968 USGS topo and was constructed between 1952 and 1957 (HistoricAerials.com 2025). The pond temporarily impounds water received from seasonal wetland swales to the east and northeast and is perennial in nature with the transition between emergent wetland fringes and open water shifting depending on the water year. A series of culverts and pipes indicated that at some point the pond may be artificially filled, though no evidence of pumping was observed during site visits. Spoils, from what is presumed to be ongoing pond maintenance, were observed within the Study Area in an area northwest of the pond. The western (offsite) perimeter of the pond appears to be made of a created rock berm. While the southwest pond outflow is on private property and was not accessible during site visits, it appears to drain through a culvert in the southwest along the created impoundment.

4.3 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Database (NRCS 2025), two soil mapping units occur within the Study Area (**Figure 6**): (106) Andregg coarse sandy loam, 2 to 9% slopes and (107) Andregg coarse sandy loam, 9 to 15% slopes.

The majority of the Study Area is Andregg coarse sandy loam, 2-9% slopes (106), which is moderately deep, well drained, and located over weathered granitic bedrock. The following inclusions are found within 106: Caperton coarse sandy loam (5%), Sierra sandy loam (5%), two unnamed Andregg-like soils (10% total), and one unnamed Sierra-like soil (5%). The northwest corner of the Study Area is Andregg coarse sandy loam, 9-15% slopes (107), which is a moderately deep, well drained typic haploxeroll. This rolling soil is situated above weathered, granitic bedrock, and contains inclusions of about 5% Caperton coarse sandy loam and 5% Sierra sandy loam. An additional 8% and 3% are made up of two unnamed Andregg-like inclusions and an unnamed Sierra-like inclusion, respectively. Both of the above Andregg soils contain bare rock outcrops.

Neither of the above soil map units are listed in *Hydric Soils of the United States* (NRCS 2025) however, (106) may contain hydric inclusions in drainageways (NRCS 2025).

5.0 RESULTS

Table 2 provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the Study Area. The following set of criteria was used to determine each species' potential for occurrence on the site:

- Present: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- High: The site is within the known range of the species and suitable habitat exists.
- Moderate: The site is within the known range of the species and very limited suitable habitat exists.
- Low: The site is within the known range of the species and there is marginally suitable habitat or the species was not observed during protocol-level surveys conducted onsite.
- Absent/No Habitat Present: The site does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted onsite, or the site is outside the known range of the species. This category was also used for all assessed raptor and songbird species that do not have the potential to breed onsite.

Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State		D : :: 16 O
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Plants				
Allium jepsonii		CRPR 1B.2	Prefers cismontane woodland or lower	No Habitat Present. No
Jepson's onion			montane coniferous forests associated	serpentine or volcanic soils
			with serpentine soils or volcanic slopes	present and outside of the
			(elevation 985'-4,300')	elevational range of the species.
Balsamorhiza macrolepis		CRPR 1B.2	Prefers chaparral, cismontane woodland,	Absent. Marginally suitable
Big-scale balsamroot			and valley and foothill grasslands. Often	habitat is present, but this plant
			associated with serpentine soils	was not found during 2023
			(elevation 150'-5,100').	protocol-level surveys.
Calycadenia spicata		CRPR 1B.3	Occurs in disturbed areas and openings	Absent. Marginally suitable
Spicate rosinweed			in cismontane woodland and annual	habitat is present, but this plant
			grassland. Often associated with adobe	was not found during 2023
			clay, gravelly areas, rock outcrops and	protocol-level surveys.
			mine tailings (elevation 130'-4,600').	
Calystegia stebbinsii	FE	CE,	Foothill chaparral and cismontane	No Habitat Present. No
Stebbins' morning glory		CRPR 1B.1	woodland associated with gabbro soils	cismontane woodland or gabbro
			(elevation 605'-3,575').	soils present and outside of the
				elevational range of the species.
Carex xerophila		CRPR 1B.2	Prefers chaparral, cismontane woodland,	No Habitat Present. No
Chaparral sedge			lower montane coniferous forest with	cismontane woodland, lower
			serpentine or gabbro soils (elevation	montane coniferous forest with
			1,445′-2,525′).	serpentine or gabbro soils
				present and outside of the
				elevational range of the species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Ceanothus roderickii	FE	CR, CRPR	Foothill chaparral and cismontane	No Habitat Present. No
Pine Hill ceanothus		1B.1	woodland associated with gabbro and	chaparral or cismontane
			serpentine soils (elevation 805'-3,575').	woodland with serpentine or
				gabbro soils present and outside
				of the elevational range of the
				species.
Chlorogalum grandiflorum		CRPR 1B.2	Preferers, cismontane woodland,	No Habitat Present. No
Red Hills soaproot			chaparral, lower montane coniferous	cismontane woodland, chaparral,
			forest. Occurs frequently on serpentine	or lower montane coniferous
			or gabbro, but also on non-ultramafic	forest with serpentine or gabbro
			substrates; often on "historically	soils present and outside of the
			disturbed" sites (elevation 805'-5,545').	elevational range of the species.
Chloropyron molle ssp. hispidum		CRPR 1B.1	Prefers seasonally flooded, saline-alkali	No Habitat Present. No
Hispid bird's-beak			soils. Occurs in valley and foothill	alkaline soils present.
			grasslands, meadows and seeps	
			(elevation 5'-510').	
Crocanthemum suffrutescens		CRPR 3.2	Occurs in open areas within chaparral.	No Habitat Present. No
Bisbee Peak rush rose			Sometimes found in gabbro soils	chaparral or gabbro soils
			(elevation 245'-2,200').	present.
Downingia pusilla		CRPR 2B.2	Mesic areas in valley and foothill	Absent. Marginally suitable
Dwarf downingia			grassland, and vernal pools (elevation 3'-	habitat is present, but this plant
			1,460').	was not found during 2023
				protocol-level surveys.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Fremontodendron decumbens Pine Hill flannelbush	FE	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland. Rocky ridges; gabbro or serpentine endemic; often among rocks and boulders (elevation 1,395'-2,495').	No Habitat Present. No chaparral, or cismontane woodland with rocky serpentine or gabbro soils present and outside of the elevational range of the species.
Fritillaria eastwoodiae Butte County fritillary		CRPR 3.2	Foothill chaparral, cismontane woodland, and openings in lower montane coniferous forest. Sometimes found on serpentine soils (elevation 160'-4,900).	No Habitat Present. No chaparral, cismontane woodland, or lower montane coniferous forest with serpentine soils present.
Galium californicum ssp. sierrae El Dorado bedstraw	FE	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland. Restricted to gabbro or serpentine soils (elevation 330'-1,920').	No Habitat Present. No chaparral or cismontane woodland with gabbro or serpentine soils present.
Gratiola heterosepala Boggs Lake hedge-hyssop		CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds on clay soils (elevation 35'-7,790').	Absent. Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Hibiscus lasiocarpos var. occidentalis Woolly rose-mallow		CRPR 1B.2	Occurs in freshwater wetlands/marshes including edges. Often in riprap on sides of levees (elevation 0'-395').	Absent. Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Juncus leiospermus var. ahartii Ahart's dwarf rush		CRPR 1B.2	Occurs along edges of vernal pool and other seasonally ponded features (elevation 100'-750').	Absent. Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Juncus leiospermus var. leiospermus Red Bluff dwarf rush		CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools (elevation 115'-4,100').	No Habitat Present. The Study Area is outside of the geographic range of the species. The nearby CNDDB occurrence is considered to be erroneous (CNDDB 2025).
Lathyrus sulphureus var. argillaceus Dubious pea		CRPR 3	Cismontane woodlands and coniferous forests (elevation 500'-3,050').	No Habitat Present. No chaparral or cismontane woodland present and outside of the elevational range of the species.
Legenere limosa Legenere		CRPR 1B.1	Occurs in vernal pools (elevation 5'-2,885').	Absent. Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Navarretia myersii ssp. myersii Pincushion navarretia		CRPR 1B.1	Found in vernal pools (often acidic) (elevation 65'-1,085').	Absent. Marginally suitable habitat is present, but this plant was not found during 2023 protocol-level surveys.
Orcuttia viscida Sacramento Orcutt grass	FE	CE, CRPR 1B.1	Occurs in vernal pools (elevation 100'-330').	No Habitat Present. No suitable vernal pools present.
Packera layneae Layne's ragwort	FT	CR, CRPR 1B.2	Foothill chaparral and cismontane woodland with rocky, gabbro, or serpentine soils (elevation 655'-3,560').	No Habitat Present. No chaparral or cismontane woodland with rocky gabbro or serpentine soils present and outside of the elevational range of the species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Sagittaria sanfordii		CRPR 1B.2	Occurs in emergent marsh habitat,	Absent. Suitable habitat is
Sanford's arrowhead		0	typically associated with drainages,	present, but this plant was not
			canals, or irrigation ditches (elevation 0'-	found during 2023 protocol-
			2,135').	level surveys.
Viburnum ellipticum		CRPR 2B.3	Found in chaparral, cismontane	Absent. Marginally suitable
Oval-leaved viburnum			woodlands, and lower cismontane	habitat is present, but this plant
			coniferous forests generally on north-	was not found during 2023
			facing slopes or otherwise more mesic	protocol-level surveys.
			areas (elevation 700'-4,600').	
Wyethia reticulata		CRPR 1B.2	Foothill chaparral and cismontane	No Habitat Present. No
El Dorado County mule ears			woodland associated with clay or gabbro	chaparral or cismontane
			soils (elevation 605'-2065').	woodland with clay or gabbro
				soils present and outside of the
				elevational range of the species.
Invertebrates				
Bombus crotchii		CC	Occurs in open grasslands and scrub	Low. Marginally suitable habitat
Crotch's bumble bee			habitats. This species occurs primarily in	is present; the annual brome
			California including the Mediterranean	grasslands and mixed oak
			region, Pacific Coast, Western Desert,	woodlands could support
			Great Valley, and adjacent foothills	suitable foraging flower
			through most of southwestern California.	populations and small burrows
			This species was historically common in	made by fossorial mammals
			the Central Valley of California but now	(e.g., Botta's pocket gopher,
			appears to be absent from most of it,	California vole) provide potential
			especially in the center of its historic	nesting and overwintering
			range.	habitat.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Branchinecta lynchi Vernal pool fairy shrimp	FT		Occurs in vernal pools.	Low. Extremely marginally suitable habitat is present within one of the seasonal wetlands (SW-1); protocol-level dry surveys conducted in 2010 did not identify this species within the Study Area.
Danaus plexippus Monarch butterfly	FC		Migratory species; most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed (Asclepias species) plants as their exclusive larval host.	Low. A few scattered milkweed plants are present which could support larvae of this species, and adults could forage on floral resources within the Study Area. The Study Area is outside of the overwintering range of the species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT		Dependent upon elderberry (Sambucus species) plant as primary host species.	Absent. No elderberry shrubs present.
Lepidurus packardi Vernal pool tadpole shrimp	FE		Occurs in vernal pools.	Absent/No Suitable Habitat. No suitable habitat is present as onsite seasonal wetlands and seasonal wetland swales do not exhibit sufficient hydroperiods to support this species; protocollevel dry surveys conducted in 2010 did not identify this species within the Study Area.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Habitat Barrainan arta	Batanti I (a Carrenne
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Fish				
Oncorhynchus mykiss irideus	FE		This anadromous species requires	No Habitat Present. No
Steelhead – Central Valley Distinct			freshwater water courses with gravelly	freshwater water courses
Population Segment (DPS)			substrates for breeding. The young	present.
			remain in freshwater areas before	
			migrating to estuarine and marine	
			environments.	
Amphibians				
Spea hammondii	FC	CSC	Breeds in vernal pools, seasonal wetlands	Low. Marginally suitable
Western spadefoot			and associated swales. Forages and	breeding habitat is present
			hibernates in adjacent grasslands.	within the seasonal wetlands and
				some of the seasonal wetland
				swales and the undeveloped
				terrestrial vegetation
				communities presents suitable
				upland habitat refugia/foraging.
Reptiles				
Actinemys marmorata	FC	CSC	Occurs in ponds, rivers, streams,	High. Suitable habitat for this
Northwestern pond turtle			wetlands, and irrigation ditches with	species is present in the pond,
			associated marsh habitat.	and multiple turtles of unknown
				species were observed basking
				on logs along the pond during
				site visits. This species is known
				to occur on an adjacent
				property.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Habitat Damiiramanta	Batantial for Commence
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Birds	<u> </u>			
Colonial nesting water birds			Water birds such as great blue heron	Absent. Marginal nesting
			(Ardea herodias), great egret (Ardea	habitat is present in the trees
			alba), snowy egret (Egretta thula), and	adjacent to the pond. No
			black-crowned night heron (Nycticorax	rookeries have been observed
			nycticorax) nest colonially in large groups	onsite during surveys.
			known as "rookeries". Some of these	
			species nest in large trees near perennial	
			water, while others prefer to nest in or	
			adjacent to dense emergent marsh.	
Accipiter cooperii			Inhabits forested habitats, forest edge,	High. Onsite trees provide
Cooper's hawk			and riparian habitat, may forage in	suitable nesting habitat and the
			adjacent grassland and fields.	oak woodland and annual
				brome grassland provide
				suitable foraging habitat.
Agelaius tricolor		CE, CSC	Colonial nester in cattails (Typha spp.),	Low. Small to medium-sized
Tricolored blackbird			bulrushes (Scirpus or Schoenoplectus	blackberry thickets and cattails
			spp.), blackberries (Rubus spp.), non-	patches around the pond
			native mustards (Brassica spp.), thistles	margins provide marginally
			(Cirsium spp.), and mallows (Malva spp.)	suitable nesting habitat and the
			associated with marsh habitat sand in	annual brome grasslands
			Triticale agriculture fields. Nesting	provide foraging habitat.
			habitat may be as small as 0.01 acres	
			adjacent to suitable foraging habitat	
			such as grazed grasslands, irrigated	
			pasture, shallow wetlands, and	
			agricultural fields.	

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Ammodramus savannarum Grasshopper sparrow		CSC	Typically found in expansive short to middle-height, moderately open grasslands with scattered shrubs or other song perches.	Low. The annual brome grassland is marginally suitable breeding and foraging habitat for this species.
Aquila chrysaetos Golden eagle		CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	Moderate. Moderately suitable nesting habitat is present in scattered large trees onsite and the annual brome grassland provides marginally suitable foraging habitat.
Asio flammeus Short-eared owl		CSC	Typically found in open areas with few trees such as grasslands, prairies, dunes, meadows, and croplands.	No Habitat Present. This species does not breed in the range of the Study Area, could occasionally forage within the Study Area.
Athene cunicularia Burrowing owl		CC, CSC	Nests in abandoned ground squirrel (Otospermophilus beecheyi) burrows associated with open grassland habitats.	No Habitat Present. The Study Area does not support California ground squirrel burrows which provide suitable nesting habitat. Additionally, the acreage of the annual brome grassland is small surrounded by woodland and residential land uses which deters foraging.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Buteo regalis			Not known to nest in California. Forages	No Habitat Present. This
Ferruginous hawk			in open areas such as grasslands and	species does not breed in
			fields for ground squirrels as well as	California, could occasionally
			other small mammals, birds, lizards,	forage within the Study Area.
			snakes, and rabbits.	
Buteo swainsoni		СТ	Nests in large trees, preferably in riparian	Moderate. Moderately suitable
Swainson's hawk			areas. Forages in fields, cropland,	nesting habitat is present in
			irrigated pasture, and grassland near	scattered large trees onsite. The
			large riparian corridors.	annual brome grassland acreage
				is too small to provide suitable
				foraging habitat.
Circus hudsonius (formerly C.		CSC	Nests in emergent wetland/marsh, open	Low. The annual brome
cyaneus)			grasslands, or savannah habitats.	grassland and open areas along
Northern harrier			Forages in open areas such as marshes,	the pond provide marginally
			agricultural fields, and grasslands.	suitable nesting and foraging
				habitat for this species.
Contopus cooperi		CSC	Nests in late-successional conifer forests	No Habitat Present. No conifer
Olive-sided flycatcher			with open canopies. Mostly associated	forests present for breeding,
			with edges and openings in otherwise	could occasionally forage within
			relatively dense forests, but they also	the Study Area.
			occupy semi open forests.	

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Helitat Berninger	Data with for Comm
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Cypseloides niger		CSC	Nest on ledges or in crevices in steep	No Habitat Present. No cliffs,
Black swift			cliffs, either along the coast or near	crevices, streams or waterfalls
			streams or waterfalls in mountains.	present for breeding, could
			Found in over mountains and coastal	occasionally forage within or
			cliffs. They forage over a wide array of	high over the Study Area.
			terrain but are local in occurrence, likely	
			limited to regions with suitable nesting	
			sites.	
Elanus leucurus		CFP	Open grasslands, fields, and meadows	High. The trees present suitable
White-tailed kite			are used for foraging. Isolated trees in	nesting habitat the annual
			close proximity to foraging habitat are	brome grassland provides
			used for perching and nesting.	suitable foraging habitat.
Empidonax traillii		CE	Inhabits extensive thickets of low, dense	No Habitat Present. No dense
Willow flycatcher			willows on edge of wet meadows, ponds,	willow thickets present for
			or backwaters; 2000-8000 ft elevation.	breeding, could occasionally
			Requires dense willow thickets for	forage within the Study Area.
			nesting/roosting. Low, exposed branches	
			are used for singing posts/hunting	
			perches.	
Falco columbarius	None	None	It is not known to nest in California, but it	No Habitat Present. This
Merlin			is a winter transient throughout most of	species does not breed in
			the state with wintering populations in	California could occasionally
			the Central Valley.	forage within the Study Area.
Falco mexicanus			Nests on scrapes on a sheltered ledge of	No Habitat Present. No ledges
Prairie falcon			cliffs overlooking a large, open area.	or cliffs present for breeding,
			Forages in open areas.	could occasionally forage within
				the Study Area.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Haliaeetus leucocephalus		CE	Nest in large trees within 1 mile of lakes,	Low. Marginally suitable
Bald eagle			rivers, or larger streams.	foraging habitat is present in the
				Study Area's pond and other
				ponds that occur within 1 mile of
				the Study Area, and marginally
				suitable nesting trees are
				present.
Icteria virens		CSC	This species occupies early-successional	No Habitat Present. No dense
Yellow-breasted chat			riparian habitats with well-developed	riparian habitats present for
			shrub layer and open canopy along	breeding, could occasionally
			streams, creeks, sloughs, and rivers.	forage within the Study Area.
Botaurus exilis		CSC	Nests in freshwater and brackish marshes	No Habitat Present. No tall,
Least bittern			with tall, dense emergent vegetation and	dense emergent vegetation and
			clumps of woody plants over deep water.	clumps of woody plants present.
Lanius ludovicianus		CSC	Occurs in open areas with sparse trees,	No Habitat Present. No large
Loggerhead shrike			shrubs, and other perches.	open areas with sparse trees
				present.
Laterallus jamaicensis coturniculus		CT, FP	Nests and forages in salt, brackish, and	No Habitat Present. No
California black rail			fresh marshes with abundant vegetative	marshes with abundant
			cover.	emergent vegetative cover
				present.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Habitat Baguiyamanta	Potential for Occurrence
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Melospiza melodia mailliardi		CSC	Nests in emergent freshwater marshes	Moderate. Moderately suitable
Song sparrow "Modesto"			dominated by bulrushes, and cattails as	nesting habitat is present within
population			well as riparian willow (Salix spp.)	blackberry thickets scattered
			thickets. This species also nests in	within the mixed oak forest and
			riparian forests of valley oak with a	woodland, and the Study Area is
			blackberry understory, along vegetated	near the edge of the range of
			irrigation canals and levees, and in	this species. A song sparrow
			recently planted valley oak restoration	(not identified to subspecies)
			sites.	was heard calling within the
				Study Area.
Pandion haliaetus		CDFW-	Forages along open ocean and lake	No Habitat Present. No open
Osprey		Special	shores and larger streams. Nests in the	oceans, lake shores, or large
		Animal	top of large trees located near foraging	streams present.
			areas.	
Pelecanus erythrorhynchos		CSC	Nests on isolated islands in lakes and	No Habitat Present. No
American white pelican			feeds on shallow lakes, rivers, and	isolated islands present within
(nesting colony)			marshes away from human disturbance.	the Study Area pond.
Progne subis		CSC	Nests in tall bridges and overpasses near	No Habitat Present. No tall
Purple martin			water and open areas.	bridges or overpasses present
				for breeding.
Riparia riparia		СТ	Colonial nester preferring vertical cliffs	No Habitat Present. No fine-
Bank swallow			and banks with fine textured/sandy soils	textured/sandy soils present for
			associated with riparian zones along	breeding.
			streams, rivers, and lakes.	

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Setophaga petechia Yellow warbler		CSC	Occupy riparian vegetation in close proximity to water along streams and in wet meadows. This species no longer breeds in the Central Valley but occurs as a common migrant in the fall and winter months.	No Habitat Present. This species no longer breeds in the Central Valley, could forage onsite.
Xanthocephalus xanthocephalus Yellow-headed blackbird		CSC	Colonial nester associated with deeper tule, bulrush, or cattail marsh habitats. May also be found in open areas such as grasslands or agricultural fields during migration.	No Habitat Present. No deep tule, bulrush, or cattail marshes present for breeding, could occasionally forage onsite.
Mammals				
Antrozous pallidus Pallid bat		CSC, WBWG H	Day and night roots include crevices in rocky outcrops and cliffs, caves, mines, trees, and various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators; however, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards.	High. Trees and structures within the Study Area are suitable roosting habitat for this species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Choeronycteris mexicana Mexican long-tongued bat		WBWG M	Primarily occurs in the San Diego area of California in a variety of habitats, including thorn scrub, Palo Verdesaguaro desert, semi-desert grassland, oak woodland, and tropical deciduous forests.	No Habitat Present. The Study Area is outside the known range of the species.
Corynorhinus townsendii Townsend's big-eared bat		CSC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods (<i>Sequoia sempervirens</i>) and giant sequoia (<i>Sequoiadendron giganteum</i>). Extremely sensitive to human disturbance.	No Habitat Present. No caves or cave analogues present.
Euderma maculatum Spotted bat		CSC, WBWG H	Spotted bats have been found from below sea level to 2,700 m elevation, occurring from arid, low desert habitats to high elevation conifer forests. Prominent rock features appear to be a necessary feature for roosting. Roost sites are cracks, crevices, and caves, usually high in fractured rock cliffs.	No Habitat Present. No prominent rock features, caves, or high fractured rock cliffs present.
Eumops perotis californicus Western mastiff bat		CSC, WBWG H	Roosts in high rock outcrops, trees, buildings, and tunnels. Generally regarded as a higher altitude forager.	High. Trees and structures within the Study Area are suitable roosting habitat for this species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Halifat Barrian and	D. C.
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Lasionycteris noctivagans Silver-haired bat		WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. It forages in open wooded areas near water features.	No Habitat Present. The Study Area is outside the known range of the species.
Lasiurus frantzii (formerly L. blossevillii) Western red bat		CSC, WBWG H	Requires large leaf trees such as cottonwoods (<i>Populus</i> spp.), willows (<i>Salix</i> spp.), and fruit/nut trees for daytime roosts. Often associated with wooded habitats that are protected from above and open below. Often found in association with riparian corridors. Requires open space for foraging.	Moderate. Trees scattered throughout the Study Area are suitable roosting habitat for this species.
Lasiurus cinereus Hoary bat		WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	High. Trees scattered throughout the Study Area are suitable roosting habitat for this species.
Lasiurus xanthinus Western yellow bat		CSC, WBWG H	Found in southern California in association with palms and other desert riparian habitats. Individuals commonly roost in dead palm fronds and cottonwood trees, hanging from the underside of a leaf. Feeds around natural and non-natural water features in open grassy areas and scrub, in canyon and riparian situations, and over swimming pools, lawns in residential areas, and orchards.	No Habitat Present. The Study Area is outside the known range of the species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name (Common Name)	Federal Status ¹	State Status ¹	Habitat Requirements	Potential for Occurrence
Macrotus californicus		CSC, WBWG	Occurs in the lower Sonoran deserts of	No Habitat Present. The Study
California leaf-nosed bat		Н	California.	Area is outside the known range
				of the species.
Myotis ciliolabrum		WBWG M	Associated with arid wooded or shrubby	Low. The onsite structures
Western small-footed myotis			uplands near water. Roosts in caves,	present marginally suitable
			buildings, mines, and crevices.	roosting habitat; the Study Area
				is just outside the known range
				of the species
Myotis evotis		WBWG M	Occurs in semiarid shrublands, sage,	Low. The onsite trees and
Long-eared myotis			chaparral, and agricultural areas, but is	structures present marginally
			usually associated with coniferous	suitable roosting habitat;
			forests. Individuals roost under	however, the Study Area is just
			exfoliating tree bark, and in hollow trees,	outside the known range of the
			caves, mines, cliff crevices, sinkholes, and	species.
			rocky outcrops on the ground. They also	
			sometimes roost in buildings and under	
			bridges.	
Myotis thysanodes		WBWG H	Roosts in crevices in buildings,	High. Trees and structures
Fringed myotis			underground mines, rocks, cliff faces,	within the Study Area are
			bridges, and in large decadent trees and	suitable roosting habitat for this
			snags.	species.

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Table 2. Special-Status Species with Potential to Occur within the Study Area

Scientific Name	Federal	State	Habitat Daguiraments	Potential for Occurrence
(Common Name)	Status ¹	Status ¹	Habitat Requirements	Potential for Occurrence
Myotis lucifugus		WBWG M	Occurs over a widespread region of	No Habitat Present. The Study
Little brown bat			California, mainly found in mountainous	Area is outside the known range
			and riparian areas in a wide variety of	of the species.
			forested habitats including tree-lined	
			xeric-scrub to aspen meadows to Pacific	
			Northwest rain forests. Roosts in tree	
			cavities and crevices close to foraging	
			grounds. Often associated with humans.	
Myotis volans		WBWG H	Long-legged myotis occurs in coniferous	No Habitat Present. Coniferous
Long-legged myotis			forests, but also seasonally in riparian	forests and desert habitat are
			and desert habitats. Summer day roosts	not present within the Study
			consist of abandoned buildings, cracks in	Area.
			the ground, cliff crevices, exfoliating tree	
			bark, and hollows within snags.	
Nyctinomops femorosaccus		CSC, WBWG	Occurs in southern California deserts,	No Habitat Present. The Study
Pocketed free-tailed bat		М	roost in cervices of cliffs and rocky	Area outside the known range of
			outgroups in groups numbering up to	the species.
			about 100.	
Nyctinomops macrotis		CSC, WBWG	Live in deserts and arid grasslands where	No Habitat Present. The Study
Big free-tailed bat		М	rocky outcrops, canyons, or cliffs provide	Area outside the known range of
			ideal roosts. Will occasionally roost in	the species.
			buildings.	

¹Status Codes:

CC - CDFW Candidate for Listing CE - CDFW Endangered
CSC - CDFW Species of Concern CT - CDFW Threatened
WBWG H - Western Bat Working Group High Threat Rank

CFP - CDFW Fully Protected FE - Federally Endangered CRPR - California Rare Plant Rank FT - Federally Threatened CR - California Rare

FC - Federal Candidate for Listing

WBWG M - Western Bat Working Group Medium Threat Rank

Figures 3 and **4** are exhibits displaying CNDDB occurrences and USFWS-defined critical habitats within five miles of the Study Area. Below is a discussion of all special-status plant and animal species with potential to occur within the Study Area.

5.1 Plants

While the Study Area presents suitable or marginally suitable habitat for a number of special-status plant species, no special-status plant species were observed during the 2023 protocol-level special-status plant surveys of the Study Area (Madrone 2023).

5.2 Invertebrates

The Study Area has low potential to support two special-status invertebrate species; Crotch's bumble bee and monarch butterfly.

5.2.1 Crotch's Bumble Bee

Crotch's bumble bee (*Bombus crotchii*) is not federally listed but is a candidate for listing under CESA. This species has a limited distribution in southwestern North America, occurring primarily in California, including the Mediterranean region, Pacific Coast, West Desert, Great Valley, and adjacent foothills through most of southwestern California. It also occurs in Mexico (Baja California and Baja California Sur) (Williams et al. 2014) and has been documented in southwest Nevada, near the California border. This species was historically common in the Central Valley of California but now appears to be absent from most of it, especially in the center of its historic range (Williams et al. 2014). In California, Crotch's bumble bees inhabit 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 California ground squirrels, mice, and rats or occasionally abandoned bird nests (Osborne et al. 2008). 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. Furthermore, areas with woody cover, or other sheltered areas provide bumble bees sites to build their nests (e.g., downed wood, rock walls, brush piles).

Bumble bees depend on the availability 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. They generally prefer flowers that are purple, blue or yellow; they are essentially blind to the color red. The plant families most commonly associated with Crotch's bumble bee observations in California include Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae (Xerces Society et al. 2025). Very little is known about

hibernacula, or overwintering sites utilized by most bumble bees. Generally, bumble bees overwinter in soft, disturbed soil (Goulson 2010), under leaf litter or other debris (Williams et al. 2014), in abandoned holes made by fossorial mammals or occasionally in abandoned bird nests (Osborne et al. 2008). Some species nest on the surface of the ground (in grassy tussocks) or in empty cavities (hollow logs, dead trees, under rocks, etc.). Queens most likely overwinter in small cavities just below or on the ground surface.

The annual brome grasslands within the Study Area present marginally suitable habitat for this species, with flowers providing nectar resources and small ground burrows made by fossorial mammals such as Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*) offering suitable nesting and overwintering locations. There are no CNDDB occurrences of Crotch's bumble bee within 5 miles of the Study Area (CNDDB 2025). One observation of Crotch's bumble bee has been recorded in the Bumble Bee Watch database at the Town of Loomis Library and Placer County Master Gardner Demonstration Garden, located approximately 2.2 miles north of the Study Area (Xerces Society et al. 2025). This observation also appears in iNaturalist (possibly twice), with an identification rating of Research Grade (iNaturalist 2025).

5.2.2 Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened pursuant to FESA. Historically, the range of vernal pool fairy shrimp extended throughout the Central Valley of California. Vernal pool fairy shrimp populations have been found in several locations throughout California, with habitat extending from Stillwater Plain in Shasta County through the Central Valley to Pixley in Tulare County, and along the Central Coast range from northern Solano County to Pinnacles National Monument in San Benito County (Eng et al. 1990, Fugate 1992). Additional populations occur in San Luis Obispo, Santa Barbara, and Riverside counties. The historic and current ranges of vernal pool fairy shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times (USFWS 2005). The life cycle of vernal pool fairy shrimp is adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales. Fairy shrimp embryos survive the dry season in cyst form. Cysts "hatch" soon after pools become inundated during the wet season. Fairy shrimp complete their life cycle quickly and feed on small particles of detritus, algae, and bacteria (Eriksen and Belk 1999).

One seasonal wetland (SW-1; located just north of the pond) within the Study Area present extremely marginally suitable habitat for vernal pool fairy shrimp. This one wetland appears to exhibit appropriate ponding depth and duration for this species, although its location under a mature blue oak tree results in significant leaf litter and vegetation community which is not the typical vegetation for features supporting vernal pool fairy shrimp. All other seasonally inundated features within the Study Area do not present suitable habitat due to flowing water/sloped topography, unsuitable vegetation (e.g., Himalayan blackberry, *Rubus armeniacus*), or incompatible hydrological influences (e.g., overflow ponding from the adjacent pond, unseasonal runoff from adjacent landscaping irrigation). Dry season sampling for federally listed large branchiopods (which includes vernal pool fairy shrimp) was conducted within the Study Area in 2010 and no branchiopod cysts were found (Helm 2010). There are four occurrences of vernal pool fairy shrimp within 5 miles of the Study Area (CNDDB 2025). The closest two occurrences are located in Roseville (Occurrence

229 and 230) and recent aerial imagery shows the locations have been developed (Google Earth 2025). The remaining two occurrences are both over 4 miles from the Study Area.

5.2.3 Monarch Butterfly

The monarch (*Danaus plexippus*) is a candidate for listing pursuant to FESA. It is a large conspicuous species of butterfly that occurs in North, Central, and South America; Australia; New Zealand; islands of the Pacific and Caribbean; and elsewhere (Malcolm and Zalucki 1993 in USFWS 2020). This species can occur in fields, roadside areas, open areas, wet areas or urban gardens and requires flowering plants as a food source and healthy and abundant milkweed (generally *Asclepius* spp.) for laying eggs on as larval host plants (USFWS 2022). During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (*Asclepias* spp.), and larvae emerge after two to five days (Zalucki 1982 in USFWS 2020). Larvae develop over a period of 9 to 18 days, feeding on the milkweed and then pupate into chrysalis before eclosing 6 to 14 days later as an adult butterfly (USFWS 2020). Multiple generations of monarchs are produced during the breeding season, with most adult butterflies living approximately two to five weeks (USFWS 2020).

In western and eastern North America, overwintering adults enter into reproductive diapause (suspended reproduction) and live 6 to 9 months (Cockrell et al. 1993 in USFWS 2020). In the fall, monarchs begin migrating to their overwintering sites. Migratory individuals in western North America generally fly south and west to overwintering groves along the California coast into northern Baja California (Solensky 2004 in USFWS 2020).

In California, monarchs both continue to occupy and breed in areas near their overwintering sites throughout the year, as well as dispersing over multiple generations to occupy and breed throughout the state in the spring through fall (USFWS 2020). Migrating monarchs in western North America tend to occur more frequently near water sources such as rivers, creeks, roadside ditches, and irrigated gardens (Morris et al. 2015 in USFWS 2020). In California's central valley, monarch butterflies breed between 15 March and 31 October (Xerces Society 2018).

Adult monarch butterflies require a diversity of blooming nectar resources during breeding and migration (spring through fall). Monarchs also need milkweed (for both oviposition and larval feeding) embedded within this diverse nectaring habitat.

While this species was not observed onsite during field surveys, one large patch of narrowleaf milkweed (*Asclepius fascicularis*), a larval host plant for monarch butterfly, was documented within the Study Area. Additionally, flowering plants within the Study Area may provide nectar for foraging adults. A query of the Western Monarch Milkweed Database yielded one observation of a foraging adult monarch in 2021 approximately 2.8 miles northeast of the Study Area, a second observation of a foraging adult in 1965 approximately 2.7 miles southeast of the Study Area, a third observation of a foraging adult in 2024 approximately 3.4 miles southeast of the Study Area, and one observation of breeding (larvae) in 2022 approximately 4.5 miles southwest of the Study Area (WMMM 2025). A query of iNaturalist (2025a) shows four Research Grade observations of monarch butterfly within 0.8 miles of the Study Area in 2022-2023.

5.3 Amphibians

The Study Area has a low potential to support one special-status amphibian species, western spadefoot.

5.3.1 Western Spadefoot

The western spadefoot (Spea hammondii) is a federally proposed threatened species and is considered a CDFW Species of Special Concern. This amphibian is a nocturnal animal that forages in open treeless grasslands, scrub, or mixed woodland and grassland where aquatic breeding habitat is in sufficiently close proximity (Stebbins and McGinnis 2012). Western spadefoot breeds from January through May in variety of temporary wetlands including creeks, pools in intermittent drainages, vernal pools, seasonal wetlands, and other predator-free water features with sufficient duration of inundation. The tadpoles develop in 3 to 11 weeks and must complete their metamorphosis before the temporary pools dry. Post-metamorphic juveniles feed and then immediately disperse into the surrounding uplands to seek underground refugia. Following metamorphosis, the adults are largely terrestrial in nature and will burrow into sandy or gravelly soils utilizing the "spades" on the hind feet. The soil must be relatively sandy and friable as these soil attributes facilitate both digging and water absorption (Ruibal et al. 1969 and Baumberger 2013 in USFWS 2023). Western spadefoots typically burrow approximately 3 feet below ground during estivation (Stebbins and McGinnis 2012 in USFWS 2023). The majority of an adult's life is spent in underground burrows (USFWS 2005). Western spadefoots are known to breed in relatively deep vernal pools, seasonal wetlands, manmade features, such as ponded areas adjacent to railroad tracks, and in intermittent drainage plunge pools or similar pools that hold water through late spring (Stebbins and McGinnis 2012). The species can breed in perennial aquatic features, but such habitats typically support a higher abundance of native and nonnative predators that consume western spadefoot larvae (Jennings and Hayes 1994).

Western spadefoot dispersal distances into uplands have not been well researched, although they have been documented to vary in relation to annual precipitation. To date, this has only been studied on a population in Orange County. In this population, during a dry year, the mean distance individuals moved away from breeding pools was 131 feet, with the longest movement of an individual being 860 feet (Baumberger 2013 in USFWS 2023). In the same population during a wet year, the mean distance moved away from breeding pools was 450 feet, and the maximum distance a spadefoot dispersed was 1,985 feet (Baumberger et al. 2020 in USFWS 2023).

The seasonal wetlands and some of the seasonal wetland swales within the Study Area present marginally suitable breeding habitat for western spadefoot. There is one documented occurrence of western spadefoot within 5 miles of the Study Area (Occurrence # 72) (CNDDB 2025). This occurrence is located approximately 3.2 miles southeast of the Study Area along the railroad tracks that occur southeast of the intersection of Highway 65 and Interstate 80.

5.4 Reptiles

The Study Area has a high potential to support one special-status reptile species, northwestern pond turtle.

5.4.1 Northwestern Pond Turtle

The northwestern pond turtle (*Actinemys marmorata*) is a federally proposed threatened species and is considered a CDFW Species of Special Concern. The northwestern pond turtle occupies a wide variety of permanent and ephemeral aquatic habitats and originally inhabited many of the pacific drainage basins in California (Stebbins 2003). Its favored habitats include streams, large rivers and canals with slow-moving water, aquatic vegetation, and open basking sites (Jennings and Hayes 1994). Both flowing water habitats (e.g., rivers and streams) and isolated waters (e.g., ponds and reservoirs) are used by northwestern pond turtles, although this species is a relatively poor swimmer and tends to seek areas with slow, shallow, warmer water, often with emergent vegetation. Ponds that are near to streams are often the favored habitat. Although northwestern pond turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. It also may spend a significant amount of time in upland terrestrial habitats as well and can over-winter on land or in water or remain active in the winter, depending on environmental conditions (Rathbun et al. 1993, Jennings and Hayes 1994).

This species breeds from mid to late spring in adjacent open grasslands or sandy banks (Jennings and Hayes 1994). Females travel from aquatic sites into open, grassy areas to lay eggs in a shallow nest (Holland 1994, Rathbun et al. 1993). Nests have been reported from 6 to 1,315 feet or more away from water bodies (Jennings and Hayes 1994) and are typically 4 to 6 inches deep. Nesting sites are typically limited to southfacing slopes or sections of a water body (Geist et al. 2015, Rathbun et al. 1993).

The large pond within the Study Area presents suitable northwestern pond turtle breeding habitat, and numerous turtles, which were not identified to species, were observed basking on logs along the pond margins during site visits. Additionally, northwestern pond turtle has been seen by Madrone biologists within a pond on a property adjacent to the Study Area. There are two documented CNDDB occurrences of northwestern pond turtle within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). Both occurrences lie just under 5 miles from the Study Area, with one occurrence at the Baldwin Reservoir and the other at Folsom Lake (CNDDB 2025).

5.5 Birds

The Study Area provides habitat for a variety of special-status avian species. These are discussed further below.

5.5.1 Cooper's Hawk

Cooper's hawk (*Accipiter cooperi*) is not listed pursuant to either CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. This raptor is a forest and woodland bird that is often found in leafy suburbs, parks, residential neighborhoods, fields, and backyard bird feeders (Cornell University 2025a). Cooper's hawks hunt by stealth, approaching their prey through dense cover and then pouncing with a rapid, powerful fight, feeding mostly on birds and small mammals (Audubon 2025a). They have also been observed on occasion drowning captured prey in water (Cornell University 2025a). This species prefers

nesting in deciduous or coniferous trees typically 25 to 50 feet above ground level, often on flat ground rather than hillsides, and in dense woods (Audubon 2025a, Cornell University 2025a).

The Study Area presents highly suitable nesting and foraging habitat for Cooper's hawk. While there are no CNDDB documented occurrences of Cooper's hawk within five miles of the Study Area (CNDDB 2025), numerous recent sightings of this species have been recorded in eBird (2025) and iNaturalist (2025) within 5 miles of the Study Area, many with photographs supporting correct identification, and one record in 2020 with nesting with confirmed young approximately 3.6 mile west of the Study Area. Additionally, Madrone biologists have observed a nesting Cooper's hawk approximately 1.3 miles northwest of the Study Area in 2020, which successfully fledged two young.

5.5.2 Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) populations, which are currently in decline throughout the state, were listed as threatened under CESA by the California Fish and Game Commission on 19 April 2018. Historically, colonies were established in freshwater marshes dominated by cattails (*Typha* spp.) and bulrushes (*Scirpus* or *Schoenoplectus* spp.) (Shuford and Gardali 2008). More recently, they have utilized non-native mustards (*Brassica* spp.), blackberries (*Rubus* spp.), thistles (*Cirsium* spp.), and mallows (*Malva* spp.) as nesting substrate (Airola et al. 2016). Since the 1980s, the largest colonies have been observed in the San Joaquin Valley in cultivated fields of *Triticale*, which is a hybrid of wheat (*Triticum* sp.) and rye (*Secale* sp.) often grown as livestock fodder (Meese 2014). This current trend of nesting in active agricultural fields has further imperiled the species as nestlings typically are not fledged by the time the Triticale is harvested.

Small to medium-sized blackberry thickets and cattails patches around the pond margins provide marginally suitable nesting habitat for tricolored blackbird, and the annual brome grasslands provide marginally suitable foraging habitat. There is one documented occurrence of nesting tricolored blackbirds about 3.7 miles southwest of the Study Area (CNDDB 2025) (Figure 4). This "Wellington Way" occurrence documents a colony nesting in cattails in a freshwater marsh west of Granite Bay High School in 1997 and 1999. A query of eBird (2025) shows a record of approximately 200 individuals in this same location in 2017, vocalizing and displaying. About a dozen sightings of tricolored blackbirds have been reported within 5 miles of the Study Area, with some observations made as recently as 2024 (eBird 2025, iNaturalist).

5.5.3 Grasshopper Sparrow

Grasshopper sparrow (Ammodramus savannarum) is not listed pursuant to either the CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. Grasshopper sparrows breed across most coastal counties into the Central Valley foothills and coastal ranges. Along the coast, they are most widely distributed in the San Francisco Bay and central coast (Audubon California 2025). Grasshopper sparrows generally inhabit moderately open grasslands and prairies with patchy bare ground and scattered shrubs (Vickery 2020). They are more likely to occupy large tracts of habitat than small fragments (Vickery 2020). This species typically breeds from early May through August.

The annual brome grassland within the Study Area presents marginally suitable breeding and foraging habitat for grasshopper sparrow. There is 2023 observation of this species approximately 4.1 miles east of the Study Area which includes a photograph which supports a correct identification (eBird 2025). No CNDDB records or iNaturalist observations for grasshopper sparrow occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.5.4 Golden Eagle

Golden eagle (*Aquila chrysaetos*) is not listed pursuant to either CESA or FESA; however, it is categorized as a Species of Special Concern and a Fully Protected Species by the CDFW and is protected under the federal Bald and Golden Eagle Protection Act. This species is a very large solitary raptor that feeds on mammals, carrion, and reptiles. It typically nests in large trees or cliffsides in rolling to mountainous terrain, and forages in large, expansive open grasslands and savannahs (Shuford and Gardali 2008). Although its natural densities are generally believed to be low, it was once relatively common to the open areas of California. This species typically nests between February and August.

Moderately suitable nesting habitat for golden eagle is present in the Study Area in scattered large trees onsite and the annual brome grassland provides marginally suitable foraging habitat. Madrone biologists observed a golden eagle soaring approximately 4 miles north of the Study Area in 2024. Additionally, there is 2021 observation of this species approximately 1.1 miles east of the Study Area which notes the sighting was of an immature bird (eBird 2025). No CNDDB records or iNaturalist observations for golden eagle occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.5.5 Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed but is listed as threatened by the CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents (Shuford and Gardali 2008). Patches of foraging habitat must be of sufficient size to support this species; the CDFW (formerly CDFG) has determined that patches five acres or more in size are the minimum acreage required for viable foraging habitat (CDFG 1994). The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter (Shuford and Gardali 2008).

Moderately suitable nesting habitat for Swainson's hawk is present in scattered large trees within the Study Area and while annual brome grassland can be used for foraging, the 4.1 acres of annual brome grassland habitat within the Study Area is not of sufficient size to attract foraging Swainson's hawks (CDFG 1994). There are more than a dozen observations of Swainson's hawk within 5 miles of the Study Area as this Project is on the edge of the foothills and has more appropriate grasslands to the west. The closest Swainson's hawk observation was made in 2024 approximately a half mile west of the Study Area near the intersection of Rocklin Road and Sierra College Blvd (eBird 2025). No CNDDB records for Swainson's hawk occur within 5 miles of the Study Area (CNDDB 2025).

5.5.6 Northern Harrier

Northern harrier (*Circus hudsonius*) is not listed pursuant to either CESA or CESA; however, it is categorized as a Species of Special Concern by the CDFW. This raptor is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California (Shuford and Gardali 2008). It is a ground nesting species, and typically utilizes emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands (Shuford and Gardali 2008).

The annual brome grassland and open areas along the pond provide marginally suitable nesting and foraging habitat for northern harrier. No CNDDB records for northern harrier occur within 5 miles of the Study Area (CNDDB 2025). More than 50 sightings of northern harrier have been reported within 5 miles of the Study Area, most within the last five years (eBird 2025, iNaturalist 2025), including sightings which include photographs to support correct identification.

5.5.7 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed, but it is a CDFW Fully Protected Species. This raptor is a year-round resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands (Shuford and Gardali 2008). White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range (Shuford and Gardali 2008).

The annual brome grassland within the Study Area represents suitable foraging habitat for white-tailed kite, and the larger trees within the Study Area provide suitable nesting habitat. There is one documented occurrence (Occurrence #74) of nesting white-tailed kite within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). This observation is located at Traylor Ranch Nature Preserve approximately 4 miles north of the Study Area. A couple dozen observations of this species have been made over the last five years within 5 miles of the Study Area (eBird 2025, iNaturalist 2025). Notable observations include a 2022 photograph taken Monte Verde Park located approximately 0.95 mile east of the Study Area, and a 2025 photograph taken at Traylor Ranch Nature Preserve (same location as CNDDB Occurrence #74).

5.5.8 Bald Eagle

Bald eagle (*Haliaeetus leucocephalus*) is not listed pursuant to CESA and is no longer federally listed, but it is a CDFW Fully Protected Species and protected under the federal Bald and Golden Eagle Protection Act. This species is a year-round resident within the approximate northern half of California, and present in winter in the rest of the state (Cornell University 2025f). This species typically nests in forested areas adjacent to large bodies of water away from heavily developed areas when possible and prefer tall sturdy conifers that protrude above the forest canopy (Cornell University 2025f). Bald eagles typically eat fish but their diet will vary depending on what is available to include birds, reptiles, amphibians, invertebrates, and mammals (live, fresh, or as carrion) (Cornell University 2025f). Bald eagles are tolerant of human activity

when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate (Cornell University 2025f).

The Study Area presents marginally suitable foraging and nesting habitat for bald eagle. There is one occurrence (Occurrence # 272) of nesting bald eagle within 5 miles of the Study Area (CNDDB 2025) (**Figure 4**). This record is from 2005 with updates of use in 2006 and annually from 2008-2014 and is located approximately 4.8 miles east of the Study Area on Anderson Island in Folsom Lake. There are perhaps more than 100 observations of bald eagle within 5 miles of the Study Area, many within the last five years and including photographs which support correct identification (eBird 2025).

5.5.9 Song Sparrow "Modesto" Population

The song sparrow "Modesto" population (*Melospiza melodia mailliardi*) is not listed pursuant to either CESA or FESA; however, it is designated as a Species of Special Concern by the CDFW. Identification of this subspecies is not clear and warrants additional research. While early studies of song sparrows initially considered the Modesto population of song sparrow a recognized subspecies (Grinnell and Miller 1944, AOU 1957), more recent studies indicate that it is not diagnosable from other song sparrow subspecies, and Patten and Pruett (2009) recommend *Melospiza melodia mailliardi* be considered part of the *Melospiza melodia heermanni* subspecies of song sparrow rather than treated as a unique subspecies. However, since it is possible that future research indicates that the song sparrow "Modesto" population is genetically distinctive, it remains designated by CDFW as Species of Special Concern.

The song sparrow "Modesto" population is endemic to the north-central portion of the Central Valley (Grinnell and Miller 1944, AOU 1957) and is generally associated with freshwater emergent marshes dominated by cattails, riparian willows, or bulrushes (Grinnell and Miller 1944). Nesting has also been observed within riparian forests of valley oak with sufficient understories of blackberries and recently planted valley oak restoration sites (DiGaudio and Geupel 1998 as cited in Shuford and Gardali 2008). This species usually forages on the ground or in leaf litter for a variety of food items including seeds and small invertebrates (Grinnell and Miller 1944).

The Study Area is near where the ranges of *Melospiza melodia heermanni* and *Melospiza melodia mailliardi* meet. There are no occurrences of the "Modesto" population of song sparrow within 5 miles of the Study Area (CNDDB 2025, eBird 2025, iNaturalist 2025). It is important to note that *Melospiza melodia mailliardi* is not recognized as a unique subspecies in either eBird or iNaturalist; however, *Melospiza melodia heermanni* is a recognized subspecies in eBird and iNaturalist, and a query of these databases for this subspecies of song sparrow also yielded no observations within 5 miles of the Study Area (eBird 2025, iNaturalist 2025). There are multiple observations of *Melospiza melodia* (no subspecies given) within 5 miles of the Study Area (eBird 2025, iNaturalist 2025), and Madrone biologists heard a song sparrow singing onsite during a site visit (Attachment C); however, an identification to subspecies was not made.

5.5.10 Common Raptor Species

Common raptors and their nests are protected by Section 3503.5 of the Fish and Game Code of California and by the Federal Migratory Bird Treaty Act. These raptor species include red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*), among others. In general, raptor nesting occurs from late February/early March through late July/early August, depending upon the species and various environmental conditions.

The Study Area presents suitable nesting and foraging habitat for common raptor species, and red-tailed hawk and red-shouldered hawk were observed within the Study Area during field surveys (Attachment C).

5.5.11 Common Songbird Species

Common songbirds and their nests are protected by Section 3503.5 of the Fish and Game Code of California and by the Federal Migratory Bird Treaty Act. In general, songbird nesting occurs from late February/early March through late July/early August, depending upon the species and various environmental conditions. The Study Area presents suitable foraging and nesting habitat for a variety of common songbird species, and a number of songbird species were observed within the Study Area during field surveys (Attachment C).

5.6 Mammals

The Study Area may provide habitat for a number of bat species. These are discussed further below.

5.6.1 Pallid Bat

Pallid bat (*Antrozous pallidus*) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). This species ranges throughout western North America from British Columba's southern interior, south to Queretaro and Jalisco, and east to Texas (CDFW 2021, WBWG 2025b). Day and night roots include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating ponderosa pine [*Pinus ponderosa*] and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings (WBWG 2025b). Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators; however, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards (WBWG 2025b). Pallid bats roost alone, in small groups (2 to 20 bats), or gregariously (100s of individuals) (WBWG 2025b). Pallid bats are opportunistic generalist foragers that glean a variety of arthropod prey from surfaces but also capture insects on the wing (WBWG 2025b). They forage over open shrub-steppe grasslands, oak savannah grasslands, open Ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards (WBWG 2025b).

Suitable roosting habitat for pallid bat is present in tree hollows and under exfoliating bark on trees scattered throughout the Study Area and within the structures present in rural residence, and the adjacent open areas provide foraging habitat. No observations of this species occur within 5 miles of the Study Area in the CNDDB (CNDDB 2025) or iNaturalist (iNaturalist 2025).

5.6.2 Western Mastiff Bat

The western mastiff bat (Eumops perotis californicus) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). The western mastiff bat ranges from central Mexico across the southwestern U.S. (parts of California, southern Nevada, Arizona, southern New Mexico and western Texas), and recent surveys have extended the previously known range to the north in both Arizona (several localities near the Utah border) and California (to within a few miles of the Oregon border) (CDFW 2021, WBWG 2025b). Western mastiff bat is primarily a cliff-dwelling species, where maternity colonies of 30 to several hundred (although typically fewer than 100) roost generally under exfoliating rock slabs (e.g., granite, sandstone, columnar basalt) as well as in similar crevices in large boulders and buildings (WBWG 2025b). Maternity roosting colonies of western mastiff bats contain adult males and females at all times of year, and this species may forage in flocks (WBWG 2025b). Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 10 feet below the entrance for flight (WBWG 2025b). Western mastiff bats have been estimated to forage as much as 2,000 feet above the ground; regularly forage at 100 to 200 feet over the substrate; and probably forage for considerable distances from roosting sites (WBWG 2025b). In California, it is most frequently encountered in broad open areas, with foraging habitats including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas (WBWG 2025b).

No suitable roosting habitat for western mastiff bat is present within the Study Area as no cliffs or large boulders or buildings are present; however, this species could forage within the Study Area. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.3 Western Red Bat

The western red bat (*Lasiurus frantzii*) is not federally or state listed, but is considered a CDFW Species of Special Concern, and is classified by the WBWG as a High priority species (WBWG 2025a). This species has a broad distribution reaching from southern British Columbia in Canada, through much of the western U.S, through Mexico and Central America, to Argentina and Chile in South America (CDFW 2021, WBWG 2025b). This species is typically solitary, roosting primarily in the foliage of trees or shrubs, and day roosts are commonly found in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas, with a possible association with intact riparian habitat (particularly willows [*Salix* spp.], cottonwoods [*Populus* spp.], and sycamores [*Platanus* spp.]) (WBWG 2025b). Western red bats generally begin to forage one to two hours after sunset and typically have an initial foraging period corresponding to the early period of nocturnal insect activity, and a minor secondary activity period corresponding to insects that become active several hours before sunrise, although some bats may forage all night (WBWG 2025b). Western red

bats have been observed feeding around streetlights and flood lights, with prey items include homopterans, coleopterans, hymenopterans, dipterans, and lepidopterans (WBWG 2025b).

The trees within the Study Area provide suitable roosting habitat for western red bat, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.4 Hoary Bat

Hoary bat (*Lasiurus cinereus*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). It is also considered to be one of the most widespread of all American bats with a range extending from Canada to central Chile and Argentina as well as Hawaii, and while uncommon throughout most of the eastern U.S. and the northern Rocky Mountains, they are more common in the prairie states and Pacific Northwest (CDFW 2021, WBWG 2025b). Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees 10 to 40 feet above the ground and usually at the edge of a clearing (WBWG 2025b). Although thought to be highly migratory (often found flying in waves of large groups during autumn migration, whereas spring migration is apparently less organized), wintering sites have not been well documented, and no specific migration routes have been discerned (WBWG 2025b). Hoary bats usually emerge late in the evening to forage, although they occasionally have been observed flying during late winter afternoons or just before sunset (WBWG 2025b). Hoary bats reportedly have a strong preference for moths, but are also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2025b).

The trees within the Study Area provide suitable roosting habitat for this species, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.5 Western Small-Footed Myotis

The western small-footed myotis (*Myotis ciliolabrum*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). This species ranges across the western half of North America from British Columbia, Alberta, and Saskatchewan in Canada, throughout most of the U.S. west of the 100th Meridian, and into central Mexico and is scattered throughout California (CDFW 2021, WBWG 2025b). The western small-footed myotis occurs in deserts, chaparral, riparian zones, and western coniferous forest; it is most common above piñon-juniper forest (WBWG 2025b). Individuals are known to roost singly or in small groups in cliff and rock crevices, buildings, concrete overpasses, caves, and mines, foraging in the early in the evening on various small insects (WBWG 2025b). Copulation takes place in the fall, with sperm being stored in females until spring when ovulation occurs and females produce one young per year in late spring or early summer (WBWG 2025b).

The onsite structures present marginally suitable roosting habitat, and the Study Area is just outside the known range of the species CDFW 2021). No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.6 Long-Eared Myotis

Long-eared myotis (*Myotis evotis*) is not federally or state listed but is classified by the WBWG as a Medium priority species (WBWG 2025a). This species ranges across western North America from southwestern Canada to Baja California and eastward in the U.S. to the western Great Plains (CDFW 2021, WBWG 2025b). Long-eared myotis occurs in semiarid shrublands, sage, chaparral, and agricultural areas, but is usually associated with coniferous forests (WBWG 2025b). Individuals roost under exfoliating tree bark, and in hollow trees, caves, mines, cliff crevices, sinkholes, and rocky outcrops on the ground, and also sometimes in buildings and under bridges (WBWG 2025b). During the summer, females form small maternity colonies, whereas males and non-reproductive females roost alone or in small groups nearby. Females give birth to one young in late spring to early summer (WBWB 2025b). Long-eared myotis is a slow flier and is often described as a hovering gleaner that feeds by eating prey off foliage, tree trunks, rocks, and from the ground, eating moths and small beetles, as well as flies, lacewings, wasps, and true bugs (WBWG 2025b).

The trees and buildings within the Study Area provide suitable roosting habitat for this species, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

5.6.7 Fringed Myotis

Fridged myotis (Myotis thysanodes) is not federally or state listed but is classified by the WBWG as a High priority species (WBWG 2025a). This species ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota (CDFW 2021, WBWG 2025b). Fringed myotis occurs most commonly in elevations between 3,937 and 6890 feet and appears to be most common in drier woodlands, although it is also found in habitats including desert scrub, mesic coniferous forest, and grassland. This species roosts in crevices in buildings, underground mines, rocks, cliff faces, and bridges, and roosting in large decadent trees and snags, is common throughout its range in western U.S. and Canada (WBWG 2025b). Fringed myotis roosts have been documented in a large variety of tree species and it is likely that structural characteristics (e.g., height, decay stage) rather than tree species play a greater role in selection of a snag or tree as a roost (WBWG 2025b). Maternity roosts are colonial with colonies ranging from 10-2,000 individuals, though large colonies are exceedingly rare (WBWG 2025b). Much less information is available on roosts of males, but it is thought that they roost singly or in small groups (WBWG 2025b). The information available on hibernation is largely limited to an accounting of the types of structures used which include caves, mines and buildings (WBWG 2025b). Fringed myotis is adapted for foraging within forest interiors and along forest edges and feeds on a variety of invertebrate taxa, including flying insects such as beetles and moths as well as flightless taxa such as harvestmen, spiders, and crickets, indicating that this species catches prey both aerially and via gleaning from vegetation (WBWG 2025b).

The trees and buildings within the Study Area provide moderately suitable roosting habitat for fringed myotis, and the adjacent open areas provide suitable foraging habitat. No observations of this species occur within 5 miles of the Study Area (CNDDB 2025, iNaturalist 2025).

6.0 IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

This section details potential impacts to the biological resources discussed above associated with construction of the Project, as discussed in **Section 1.1** and shown in **Figure 7**.

6.1 Terrestrial Vegetation Communities

The Project supports 21.5 acres of mapped terrestrial vegetation communities. Of these, 1.4 acres are already developed as a rural residence and roads. Of the remaining 20.1 non-developed terrestrial vegetation communities, 18.5 acres will be developed by the Project and the remaining 1.9 acres are proposed to be avoided and incorporated into the individual lots (**Table 3** and **Figure 7**).

Table 3. Terrestrial Vegetation Community Impacts and Avoidance within the Study Area

Community Type	Impact Acreage ¹	Avoided Acreage ¹	Total Acreage
Rural Residential-Developed	1.4		1.4
Annual Brome Grassland	4.2	0.2	4.4
Mixed Oak Forest and Woodland	14.0	1.6	15.6
Total	19.6	1.9	21.5

¹ Summation errors may occur due to rounding.

6.2 Aquatic Resources

Of the approximately 5.06 acres of aquatic resources mapped within the Study Area, 0.38 acres are proposed to be directly impacted (filled) by the Project and 4.68 acres are proposed to be avoided and incorporated into the Project's onsite open space areas (**Table 4** and **Figure 7**).

Table 4. Aquatic Resources Impacts and Avoidance within the Study Area

Aquatic Resource Type	Impact Acreage ¹	Avoided Acreage ¹	Total
Wetlands			
Seasonal Wetland	0.03		0.03
Seasonal Wetland Swale	0.27	0.08	0.35
Seep	0.08		0.08
Subtotal	<u>0.38</u>	<u>0.08</u>	<u>0.73</u>
Other Waters			
Pond		4.60	4.60
Subtotal	==	<u>4.60</u>	<u>4.60</u>
Total	0.38	4.68	5.06

¹ Summation errors may occur due to rounding.

6.3 Special-Status Plant Species

The vegetation communities proposed for impact represent suitable habitat for a variety of special-status plant species, but protocol-level special-status plant surveys were conducted throughout the Study Area and no special-status plant species were found (Madrone 2023). Therefore, no impacts to special-status plant species are anticipated for the Project.

6.4 Invertebrates

The annual brome grassland and mixed oak forest and woodland habitat within the Study Area present potential habitat for three special-status invertebrate species, discussed further below.

6.4.1 Crotch's Bumble Bee

The annual brome grassland within the Study Area represents suitable foraging, nesting, and overwintering habitat for Crotch's bumble bee. The disturbance and/or removal of this habitat could adversely affect this species if construction activity results in the removal of active Crotch's bumble bee nests.

6.4.2 Vernal Pool Fairy Shrimp

One seasonal wetland within the Study Area which presents extremely marginally suitable vernal pool fairy shrimp habitat is proposed to be directly impacted by the Project (**Figure 7**). This seasonal wetland (SW-1) is approximately 0.007 acre in size. The removal of this habitat could adversely affect this species if this aquatic resource is occupied by this species.

6.4.3 Monarch Butterfly

The narrowleaf milkweed plants within the Study Area provide suitable breeding habitat for monarch butterfly eggs and larvae (i.e., caterpillars), and monarch butterfly pupae (i.e., chrysalis) could occur within the surrounding vegetation as chrysalises. If milkweed plants are removed during construction, and monarch eggs, larvae, and/or pupae are present, individuals of this species could be killed.

6.5 Western Spadefoot

Approximately 0.5 acre of marginally suitable western spadefoot breeding habitat (i.e., areas within the seasonal wetlands and seasonal wetland swales) and approximately 20 acres of upland habitat (i.e., non-developed terrestrial vegetation communities) are proposed to be directly impacted by the Project (**Figure 7**). The disturbance and/or removal of this habitat could adversely affect this species if construction activities result in the death of western spadefoot.

6.6 Northwestern Pond Turtle

The pond within the Study Area provides suitable foraging habitat for northwestern pond turtle and the adjacent annual brome grassland and mixed oak forest and woodland habitats provide suitable nesting habitat. Approximately 18.1 acres of annual brome grassland and mixed oak forest and woodland habitats within the Study Area are proposed for impact during Project construction (Figure 7). If northwestern pond turtles or their nests were present in those areas during construction, individual turtles could be injured or killed, or nests could be destroyed.

6.7 Nesting Raptors and Songbirds

Cooper's hawk (*Accipiter cooperii*), tricolored blackbird (*Agelaius tricolor*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), and song sparrow "Modesto" population (*Melospiza melodia mailliardi*) have the potential to nest within the Project area, as do other more common bird species protected by the Migratory Bird Treaty Act. Removal of bird nests which may occur as a result of Project implementation would impact those bird species. Furthermore, birds nesting in avoided areas adjacent to Project construction could be disturbed by construction activities, which could result in nest abandonment.

6.8 Foraging Raptors

Due to its small size (<5 acres), the annual brome grassland within the Study Area provides marginally suitable foraging habitat for Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), and other more common raptor species. The mixed oak forest and woodland habitat within the Study Area provides suitable foraging habitat for Cooper's hawk, white-tailed kite (*Elanus leucurus*), and other more common raptor species. Approximately 18.1 acres of annual brome grassland and mixed oak forest and woodland habitats within the Study Area are proposed for impact during Project construction (*Figure 7*). Removal of the annual brome grassland and mixed oak forest and woodland habitat by residential development could reduce reproductive success of raptors nesting in the area.

6.9 Roosting Bats

Seven special-status bat species have the potential to roost within the trees and structures within the Study Area; pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus frantzii*), hoary bat (*Lasiurus cinereus*), western small-footed myotis (*Myotis ciliolabrum*), longeared myotis (*Myotis evotis*), and fringed myotis (*Myotis thysanodes*). If special-status bats were roosting in trees or buildings that are removed by Project construction, they could be injured or killed during the removal.

6.10 Native Oak Trees

The Study Area supports numerous interior live oak, valley oak, and blue oak trees which may be subject to the Town's Tree Ordinance (see **Section 3.2.1**). The Tree Ordinance requires a tree permit for the removal of a Protected Tree or any activity within the Critical Root Zone of a Protected Tree related to a discretionary project, unless otherwise exempted.

CalTLC inventoried 496 trees within the Study Area that are currently proposed to be impacted by the Project (CalTLC 2022) (Attachment E). Of these trees, four were below the size threshold and are not considered Protected Trees; the remaining 492 trees are considered Protected Trees and their removal or activities conducted within their Critical Root Zone requires a Tree Permit issued by the Town. Of the 492 Protected Trees, 297 were rated as dying or unhealthy (Tree Rating 0, 1, or 2); therefore, the removal of these trees does not require mitigation under the Tree Ordinance. Of the remaining Protected Trees that were rated in fair or better condition, 103 will be removed and removal of these trees requires mitigation under the Tree Ordinance. These 103 trees have a combined diameter at breast height (DBH) of 2,262 inches and as summarized below in Table 5.

Table 5. Protected Tree Impacts within the Study Area

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Size of Trees	Numb	er of Trees (DBI	Total Number	Cumulative		
DBH in Inches	Interior Live Oak	Valley Oak	Blue Oak	of Trees	DBH	
4-9.9	N/A	N/A	0 (0)	0	0	
6-9.9	8 (64)	4 (35)	N/A	12	99	
10-24.9	42 (707)	17 (300)	2 (26)	61	1,033	
25-29.9	5 (131)	1 (25)	0 (0)	6	156	
30-34.9	8 (252)	0 (0)	0 (0)	8	252	
>35	16 (722)	0 (0)	0 (0)	16	722	

7.0 MITIGATION FOR IMPACTS TO SENSITIVE BIOLOGICAL RESOURCES

The following sections describe mitigation measures that are often required by CEQA lead agencies for impacts to sensitive biological resources that may be associated with construction of a given project. The intent of these mitigation measures is to reduce Project-related impacts to biological resources to a less than significant level.

7.1 Aquatic Resources

The Project applicant shall apply for a Section 404 permit from the USACE. Aquatic resources that will be impacted shall be replaced or rehabilitated on a "no-net-loss" basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE. If the USACE responds with a no permit required letter, this measure shall be considered complied with.

- The Project applicant shall apply for a Section 401 water quality certification or the applicable Waste Discharge Requirements (WDR) from the RWQCB and adhere to the certification/WDR conditions.
- The Project applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from the CDFW. Impacts for each activity will be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts will be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from Project implementation will be provided as well as a description of storm water treatment methods. Minimization and avoidance measures will be proposed as appropriate and may include pre-construction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific stormwater best management practices (BMPs). Mitigation may include restoration or enhancement of resources onsite or offsite, the purchase of habitat credits from an agency-approved offsite mitigation/conservation bank, working with a local land trust to preserve land, or any other method acceptable to the CDFW.

7.2 Special-Status Plant Species

Special-status plant surveys conducted throughout the Study Area in 2023 were negative, but given enough time, plants may become established in areas where suitable habitat exists. Therefore, if Project construction does not commence prior to 1 June 2026, another round of special-status plant surveys shall be conducted in areas proposed for impact no more than three years prior to commencement of construction. If construction commences prior to 1 June 2026, these surveys will not be required. Surveys shall be conducted in accordance with the *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), the *Botanical Survey Guidelines of the California Native Plant Society* (CNPS 2001), and *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018) or more recent protocols at that time. If no special-status plant species are found, no further mitigation would be required.

If CESA or FESA listed plant species are found and will be impacted, the appropriate permit(s) shall be obtained (e.g., CDFW-issued Incidental Take Permit or USFWS-issued Biological Opinion). Mitigation for those impacts shall be determined through consultation with the Town, USFWS, and/or CDFW; however, at minimum, if the plant species found is a perennial such as Sanford's arrowhead or big-scale balsamroot, then mitigation will consist of digging up the plant and transplanting into a suitable avoided area prior to construction. If the plant species found is an annual such as dwarf downingia, then mitigation will consist of collecting seed and translocating it into a suitable wetland at an appropriate receiving property (e.g., local open space preserve, conservation/mitigation site, land trust property). If special-status plants only considered under CEQA will be impacted, a mitigation plan will be developed and approved by the Town. Mitigation for the transplantation/translocation of special-status plants will result in no net of a given population by acreage or individual plants, as appropriate, after a five year monitoring period.

7.3 Invertebrates

7.3.1 Crotch's Bumble Bee

Crotch's bumble bee was designated as a candidate for listing under CESA in 2019, but to date no decision on listing has been published. If, at the time of Project implementation, this species is not a CESA candidate or CESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary. Furthermore, as this is a CESA candidate species, appropriate mitigation measures are still being developed and refined. We have developed the following measure based on current literature and research. If at a later date, different mitigation measures are determined to be more appropriate, those may be submitted to the Town at that time for review and approval.

- Initial ground-disturbing work (e.g., grading, vegetation removal, staging) shall take place between 1 September and 31 March (i.e., outside the colony active period), if feasible, to avoid impacts on Crotch's bumble bee.
- If completing all initial ground-disturbing work between 1 September and 31 March is not feasible, then a senior biologist with 10 or more years of experience conducting biological resource surveys within California shall conduct a pre-construction survey for Crotch's bumble bee in the area proposed for impact no more than 14 days prior to the commencement of construction activities. The survey shall occur during the period from one hour after sunrise to two hours before sunset, with temperatures between 65° F and 90° F, with low wind and no 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's bumble bee include species in the following families: Apocynaceae, Asteraceae, Boraginaceae, Fabaceae, and Lamiaceae.
- At a minimum, pre-construction 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.
 - o If Crotch's bumble bees are observed, watch them 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.

- o 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 no less than 4 inches to assist with locating the nest.
- Look for concentrated Crotch's bumble bee activity.
- Listen for the humming of a nest colony.
- o 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's bumble bee. The report shall be submitted to the Town prior to the commencement of construction activities.
- If no bumble bees are located during the pre-construction survey or the bumble bees located are definitively identified to not be Crotch's bumble bee, then no further mitigation or coordination with the CDFW is required.
- If any sign(s) of a bumble bee nest is observed, and if it cannot be established the species present is not Crotch's bumble bee, then construction shall not commence until either 1) the bumble bees present are positively identified to not be Crotch's bumble bee by an experienced bumble bee taxonomist, or 2) the completion of coordination with the 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 the CDFW.
- It is recommended, but not required, that the Project applicant also survey the proposed impact areas the year before construction begins in order to avoid potential last-minute delays associated with identifying Crotch's bumble bee onsite immediately prior to construction activities. To be most effective, this optional survey should follow the protocol outlined above.
- If Crotch's bumble bee is located within the Project, and coordination with the CDFW determines that take of Crotch's bumble bee cannot be avoided, the Project applicant shall obtain an ITP from the CDFW prior to Town approval of permits authorizing construction, and the Project applicant shall implement all conditions identified in the ITP. Mitigation required by the ITP may include but will not be limited to, the Project applicant 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 the CDFW.

If Crotch's bumble bee is listed under CESA before Project construction begins and take of Crotch's bumble bee cannot be avoided, then the Project applicant shall coordinate with the CDFW to obtain take coverage of Crotch's bumble bee which may result from Project implementation.

7.3.2 Vernal Pool Fairy Shrimp

The Project may result in the loss of potential vernal pool fairy shrimp habitat. While 2010 dry season surveys for this species were negative (Helm 2010), the Project applicant may choose to retain a qualified biologist to conduct protocol-level surveys for this species in accordance with the *Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017). If vernal pool fairy shrimp are not found during protocol-level surveys, no further mitigation will be required. If protocol-level surveys of these features are not conducted, or if vernal pool fairy shrimp are found during protocol-level surveys, then the Project applicant shall consider redesigning the Project to avoid all occupied vernal pool fairy shrimp habitat. If avoidance is not possible, then the Project applicant or the USACE (depending on the regulatory mechanism) shall consult with the USFWS under the FESA regarding impacts to vernal pool fairy shrimp associated with the Project. Regardless of the consultation method, it is expected that the USFWS will assign measures to avoid, minimize, and mitigate impacts to vernal pool fairy shrimp and will require compensatory mitigation. As such, we recommend the following measures if vernal pool fairy shrimp are located within the Study Area:

- The Project applicant shall prepare and submit to the USACE and/or USFWS a Biological Assessment which details potential impacts to and mitigation for impacts to vernal pool fairy shrimp.
- The Project applicant shall abide by mitigation measures developed during the course of the FESA consultation. At a minimum, the Project applicant shall preserve 2 acres of vernal pool branchiopod habitat for each acre of unsurveyed or documented occupied habitat impacted. Preservation methods could include preservation of habitat onsite, offsite at a permittee-responsible preservation site approved by the USFWS, purchase of habitat credits from a USFWS-approved mitigation/conservation bank, working with a local land trust to preserve land, or any other method acceptable to USFWS.

The Project applicant shall ensure that seasonal wetland occupied by vernal pool fairy shrimp that will not be filled during Project implementation is protected during construction by installation of exclusion fencing at the edge of the permitted impact area. No construction-related activity may take place in the exclusion area, and exclusion fencing shall be designed to prevent the discharge of storm water runoff from the impact area into the exclusion zone. Exclusion fencing shall be inspected by a qualified biologist or an onsite monitor trained by a qualified biologist at least weekly and immediately before and after storm events. Any breaches to the exclusion fencing shall be reported to the qualified biologist and repaired promptly. The exclusion fencing shall remain in place until all ground-disturbing construction activity is completed.

7.3.3 Monarch Butterfly

Monarch butterfly was designated as a candidate for listing under FESA in 2020, but no decision on listing has been published. If, at the time of Project implementation, this species is no longer a FESA candidate or FESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary. Furthermore, as this is a candidate species, appropriate mitigation measures are still being developed and refined. We have

developed the following measure based on current literature and research. If at a later date, a different mitigation measure is determined to be more appropriate, that can be submitted to the Town at that time for review and approval.

If construction occurs during the time when milkweed (*Asclepius* spp.) plants may host monarch butterfly eggs, larvae (i.e., caterpillars) or pupae (i.e., chrysalises) (currently believed to be 15 March through 31 October per Xerces Society 2018) and construction activity would require the removal of milkweed plants and/or 50 feet of surrounding vegetation, the plants and surrounding vegetation shall be surveyed by a qualified biologist no more than 14 days prior to plant removal for the presence of eggs, larvae, or pupae. If any monarch eggs, larvae, or pupae are found within the Study Area, they will be avoided with no work occurring within 50 feet of the monarchs until adults emerge and voluntarily leave the Study Area. If the eggs, larvae, or pupae are in the Study Area and cannot be avoided, eggs will be allowed to hatch, and all larvae and pupae will be translocated to a suitable alternative location (i.e., containing a suitable population of larval host plants) outside of the Study Area. If no eggs, larvae, or pupae are detected, no additional protection measures are necessary.

If monarch butterfly is listed under FESA before Project construction begins and take of monarch butterfly cannot be avoided, then the Project applicant shall coordinate with the USFWS to obtain take coverage of monarch butterfly that may result from Project implementation.

7.4 Western Spadefoot

Western spadefoot was designated as a candidate for listing under FESA in 2023, but no decision on listing has been published. If western spadefoot is listed under FESA before Project construction begins and take of western spadefoot cannot be avoided, the Project applicant shall coordinate with the USFWS to obtain take coverage of western spadefoot that may result from Project implementation. Furthermore, the Project applicant shall implement any additional mitigation measures required by the USFWS. If, at the time of Project implementation, this species is no longer a FESA candidate or a FESA listed species, and it does not fall into any of the other "special-status" categories defined in **Section 3.0**, then it would not qualify for protections under CEQA and no mitigation is necessary.

As this is a candidate species, appropriate mitigation measures are still being developed and refined. We have developed the following measure based on current literature and research. If at a later date, a different mitigation measure is determined to be more appropriate, that can be submitted to the Town at that time for review and approval.

The spring prior to the start of Project construction, the Project applicant shall retain a qualified biologist to survey all suitable aquatic habitat within the Project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles would be present. In addition, a qualified biologist shall conduct one nocturnal acoustic survey within the Project of all areas within 300 feet of seasonal wetlands and the pond. Acoustic surveys shall consist of walking through the area and listening for the distinctive snore-like call of this species. Timing and methodology

for the aquatic and acoustic surveys shall be based on those described in *Distribution of the Western Spadefoot* (*Spea hammondii*) in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology (Shedd 2017). The survey results shall be provided to the Town.

If both the aquatic survey and the nocturnal acoustic survey are negative, no further mitigation is necessary. If western spadefoot is observed within aquatic habitat proposed for impact, the following measures shall apply:

- Ground-disturbing activities within the delineated Project footprint will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.
- If ground-disturbing activities must be implemented after October 15 and before May 15 (dispersal season), exclusion fencing consisting of trenched in silt fencing will be installed around the Project impact area or as directed by a qualified biologist (i.e., experienced with western spadefoot identification and behavior) before October 15. Fencing will remain in place until all construction activities within the construction area are completed. No Project activities will occur outside the delineated Project footprint. The fence must be maintained in working order through the duration of the Project.
- A qualified biologist will monitor the Project site, including the integrity of any exclusion fencing.
- A qualified biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone.
- Within the delineated Project footprint, all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first.
- Only non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoot is not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.
- If a western spadefoot is encountered during construction activities, construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the work area of its own volition. If the animal does not leave the work area, a qualified biologist will coordinate with the Town to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Town. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the qualified biologist.

7.5 Northwestern Pond Turtle

Northwestern pond turtle was designated as a candidate for listing under FESA in 2023, but no decision on listing has been published. If northwestern pond turtle is listed under FESA before Project construction begins and take of northwestern pond turtle cannot be avoided, the Project applicant shall coordinate with the USFWS to obtain take coverage of northwestern pond turtle that may result from Project implementation. Furthermore, the Project applicant shall implement any additional mitigation measures required by the USFWS.

As northwestern pond turtle is a CDFW Species of Special Concern, it qualifies for protection under CEQA. Therefore, a northwestern pond turtle survey shall be conducted no more than 48 hours prior to construction where construction activities overlap with suitable aquatic habitat, and upland habitat within 150 feet of suitable aquatic habitat. If no northwestern pond turtles or their nests are found, no further mitigation is necessary. If a northwestern pond turtle is observed within the proposed impact area, a qualified biologist shall relocate the individual to the onsite pond (which lies outside of the proposed Project impact area) prior to construction. If a northwestern pond turtle nest is observed within the proposed impact area, the nest shall be fenced off and avoided until the eggs hatch. The exclusion fencing shall be placed no less than 25 feet from the nest. A qualified biologist shall monitor the nest daily during construction to ensure that hatchlings do not disperse into the construction area. Relocation of hatchlings will occur as stipulated above, if necessary.

7.6 Nesting Raptors and Other Birds

The following nest survey requirements apply if Project construction activities take place during the typical bird breeding/nesting season (typically 1 February through 1 September).

7.6.1 Golden Eagle

A targeted survey for golden eagle shall be conducted throughout the proposed Project construction area and all accessible areas within 1 mile of the proposed Project area within 14 days prior to the initiation of any Project-related construction activities. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted. If active golden eagle nests are found within 1 mile of a Project construction area, construction shall cease within 1 mile of the nest until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed. If the Project applicant desires to work within 1 mile of an active golden eagle nest, the Project applicant shall consult with a qualified biologist and the Town to determine if the nest buffer can be reduced. The Project applicant, qualified biologist, and Town shall collectively determine an appropriately reduced nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active golden eagle nest is found within the Project site prior to construction and is in a tree that is proposed for removal, then the Project applicant shall not complete tree removal until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed, as there is no permitting process to allow the take of a CDFW Fully Protected Species.

7.6.2 Swainson's Hawk

A targeted Swainson's hawk nest survey shall be conducted throughout the proposed Project construction area and all accessible areas within ¼ mile of the proposed construction area no later than 14 days prior to construction activities. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted. If active Swainson's hawk nests are found within ¼ mile of a construction area, construction shall cease within ¼ mile of the nest until a qualified biologist determines that the young have fledged and are independent of the site or it is determined that the nesting attempt has failed. If the Project applicant desires to work within ¼ mile of the nest, the Project applicant shall consult with a qualified biologist and the Town to determine if the nest buffer can be reduced. The Project applicant, a qualified biologist and the Town, shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the Project site prior to construction and is in a tree that is proposed for removal, then the Project applicant shall implement additional mitigation recommended by a qualified biologist based on CDFW guidelines and obtain any required permits from the CDFW.

7.6.3 Other Birds

A pre-construction nesting bird survey shall be conducted by a qualified biologist on the Project site and within a 500-foot radius of proposed construction areas, where access is available, no more than three days prior to the initiation of construction. If there is a gap in construction activity of 14 days or more then subsequent surveys shall be conducted.

If active raptor nests or a tricolored blackbird nesting colony are found, no construction activities shall take place within 500 feet of the nest until the young have fledged and are independent of the site. If active songbird nests are found, a 100-foot no-disturbance buffer will be established. These no-disturbance buffers may be reduced if a smaller buffer is proposed by a qualified biologist and approved by the Town after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (e.g., are there visual or acoustic barriers between the proposed activity and the nest). A qualified biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or it is determined that the nesting attempt has failed.

7.6.4 Survey Report

A report summarizing the survey(s), including those for golden eagle, Swainson's hawk, and nesting birds, shall be provided to the Town within 30 days of the completed survey and is valid for one construction season. The surveys shall be performed again if there is a gap in construction activity of 14 days or more. If no nests are found, no further mitigation is required.

7.6.5 Changes to Buffers and Completion of Nesting

Where birds are nesting within or adjacent to the Project and Project construction activities cause a nesting bird to exhibit agitated behavior (i.e., vocalize, make defensive flights at intruders, get up from a brooding position, and/or fly off the nest), then the no-disturbance buffer shall be increased such that activities are far enough from the nest to stop the observed agitated behavior. The no-disturbance buffer shall remain in place until a qualified biologist has determined that the young have fledged the nest and are independent of the site or it is determined that the nesting attempt has failed, or as otherwise determined by a qualified biologist in consultation with the Town.

Construction activities may only resume within the no-disturbance buffer zone after a follow-up survey by a qualified biologist has been conducted and a report has been provided to the Town indicating that the nest(s) is no longer active and no new nests have been identified.

7.7 Loss of Foraging Habitat

7.7.1 Swainson's Hawk

Approximately 4.1 acres of annual brome grassland within the Project will be impacted by construction of the proposed Project. While annual brome grassland habitat could be used by foraging Swainson's hawks, the CDFW has determined that patches five acres or more in size are the minimum acreage required for viable foraging habitat (CDFG 1994). Therefore, Project-related impacts to annual brome grassland habitat are not expected to have an appreciable effect on Swainson's hawks in the area and no mitigation is recommended.

7.7.2 Other Birds

Approximately 4.1 acres of annual brome grassland within the Project will be impacted by construction of the proposed Project; this acreage presents suitable foraging habitat for golden eagle, northern harrier, white-tailed kite, bald eagle, and other more common raptor species. Due to the small patch size (<5 acres), the conversion of annual grassland habitat associated with the Project is not considered significant.

7.8 Roosting Bats

- A qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint. This habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction.
- If potential roosting habitat is identified (e.g., cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat within 14 days prior to habitat removal. As roosting bats are seasonally active, it may be beneficial to conduct an additional survey well ahead of the pre-construction survey during the active season

(generally April through October or from January through March on days with temperatures in excess of 50 °F) to determine presence of roosting bats. These surveys are recommended to be conducted utilizing methods that are considered acceptable by the CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras or a combination thereof.

- If pre-construction surveys indicate that no roosts of special-status bats are present, or that roosts are inactive or potential habitat is unoccupied, no further mitigation is required.
- If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup season only on days with temperatures in excess of 50 °F. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of a qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.
- Additionally, it is recommended that all other tree removal be conducted from January through March on days with temperatures in excess of 50 °F to avoid potential impacts to foliage-roosting bat species.
- If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. Each exclusion is specific to the structure and no two are the same. All exclusions involve the installation of one-way doors or flaps during the non-breeding season that allow the bats to leave and not re-enter the structure. This plan shall be approved by the Town and shall be implemented prior to the start of construction.

7.9 Protected Trees

7.9.1 Removal of and Adverse Effects to Trees, Mitigation and Replacement

The Project would cause loss and adverse effects to 103 Protected Trees in fair or better condition with a combined diameter at breast height (DBH) of 2,262 inches through tree removal or Project-related activities within the Critical Root Zone of trees not proposed for removal. To mitigate for the loss of Protected Trees and adverse effects caused by activities with Critical Root Zones, the Project applicant shall obtain a Tree Permit from the Town prior to approval of the Project's Improvement Plans. The Town shall review the Tree Permit application and associated tree plan and determine the precise mitigation requirement at that time. Mitigation for the loss and adverse effects of Protected Trees may include payment into the Town's Tree Preservation Fund or the planting of #5 or #15 container oak trees (**Table 6**). Oak trees could be planted on the Project site surrounding the avoided pond, as part of the Project's landscape design, or within other locations as approved by the Town Manager.

Table 6. Study Area Tree Mitigation

	Size	Total Number	Mitigation Requirement				
Species	Category of Trees (DBH)	Proposed for Adverse Effects (Total DBH)	#5 (T4/ T6/ T8/ 5 Gal.) Mitigation Trees to be Planted	Or	#15 (15 Gal.) Mitigation Trees to be Planted	Or	In-Lieu Fee Amount (Per Total DBH Removed)
Blue	4-9.9	0 (0)	x 4 = 0 trees		x 2 = 0 trees		0 DBH x \$100 = \$0
Oak	10-24.9	2 (26)	x 6 = 12 trees		x 3 = 6 trees		26 DBH x \$110 = \$2,860
	25-29.9	0 (0)	x 8 = 0 trees		x 4 = 0 trees		0 DBH x \$120 = \$0
	30-34.9	0 (0)	x 10 = 0 trees		x 5 = 0 trees		0 DBH x \$130 = \$0
	>35	0 (0)	x 12 = 0 trees		x 6 = 0 trees		0 DBH x \$140 = \$0
Total:		2 (26)	13 #5 Trees	Or	6 #15 Trees	Or	\$2,860
Valley	6-9.9	4 (35)	x 3 = 12 trees		x 1 = 4 trees		35 DBH x \$90= \$3,150
Oak	10-24.9	17 (300)	x 4 = 68 trees		x 2 = 34 trees		300 DBH x \$100 = \$30,000
	25-29.9	1 (25)	x 5 = 5 trees		x 3 = 3 trees		25 DBH x \$110 = \$2,750
	30-34.9	0 (0)	x 6 = 0 trees		x 4 = 0 trees		0 DBH x \$120 = \$0
	>35	0 (0)	x 8 = 0 trees		x 5 = 0 trees		0 DBH x \$130 = \$0
Total:		22 (360)	85 #5 Trees	Or	41 #15 Trees	Or	\$35,900
Interior	6-9.9	8 (64)	x 3 = 24 trees		x 1 = 8 trees		64 DBH x \$80= \$5,120
Live	10-24.9	42 (707)	x 4 = 168 trees		x 2 = 84 trees		707 DBH x \$90 = \$63,630
Oak	25-29.9	5 (131)	x 5 = 25 trees		x 3 = 15 trees		131 DBH x \$100 = \$13,100
	30-34.9	8 (252)	x 6 = 48 trees		x 4 = 32 trees		252 DBH x \$110 = \$27,720
	>35	16 (722)	x 8 = 128 trees		x 5 = 80 trees		722 DBH x \$120 = \$86,640
Total:		79 (1,876)	393 #5 Trees	Or	219 #15 Trees	Or	\$196,210

¹ Note that trees rated 0-2 are dead, dying, or have major health or structural problems, and as such do not require mitigation under the Tree Ordinance.

To mitigate the loss of and adverse effects to Protected Trees in fair or better condition, the Project applicant shall prepare and implement a tree plan as described in the Tree Ordinance. The tree plan shall include the following:

- Planting of 491 #5 container trees or 266 #15 container trees (or a mix thereof as approved by the Town Manager) of appropriate oak species on the Project site or other locations approved by the Town Manager to attain tree replacement ratios prescribed by the Town;
- Preparation of a planting plan describing species composition and spacing, and an exhibit indicating the specific location(s) of proposed tree plantings; and
- Schedules and methodologies for maintenance, monitoring, and annual reporting to ensure that the mitigation trees survive for at least 5 years after the initial planting.

As an alternative to planting oak trees for mitigation, the Project applicant can pay into the Town's Tree Preservation Fund.

7.9.2 Avoidance of Trees, Protection Measures

Efforts should be made to save Protected Trees where feasible and incorporate them into the Project's avoided areas and landscaping. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. To document how avoided Protected Trees will be protected during Project implementation, the Project applicant shall prepare and implement a tree plan as described in the Tree Ordinance. The tree plan shall include the following:

- A description of measures to be followed to ensure survival of protected trees during construction; and
- A program for the preservation of Protected Trees and other trees not proposed for removal during and after completion of the Project, which shall include the following:
 - 1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction, but prior to installation of landscaping material;
 - 2. Fencing shall be located at the Critical Root Zone of the tree or trees and shall be a minimum of four feet in height;
 - 3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved; and
 - 4. Any and all exposed roots shall be covered with a protective material during construction.

7.10 Worker Environmental Awareness Training

Prior to any ground-disturbing or vegetation-removal activities, a Worker Environmental Awareness Training (WEAT) shall be prepared and administered to the construction crews. The WEAT will include the following: discussion of CESA and FESA, the Clean Water Act, the Project's permits and CEQA documentation, and associated mitigation measures; consequences and penalties for violation or noncompliance with these laws and regulations; identification of special-status wildlife; location of any avoided Waters of the U.S; hazardous substance spill prevention and containment measures; and the contact person in the event of the discovery of a special-status wildlife species. The WEAT will also discuss the different habitats used by the species' different life stages and the annual timing of these life stages. A handout summarizing the WEAT information shall be provided to workers to keep on-site for future reference. Upon completion of the WEAT, workers will sign a form stating that they have attended the training, understand the information presented and will comply with the regulations discussed. Workers will be shown designated "avoidance areas" during the WEAT; worker access should be restricted to outside of those areas to minimize the potential for inadvertent environmental impacts. Fencing and signage around the boundary of avoidance areas may be helpful.

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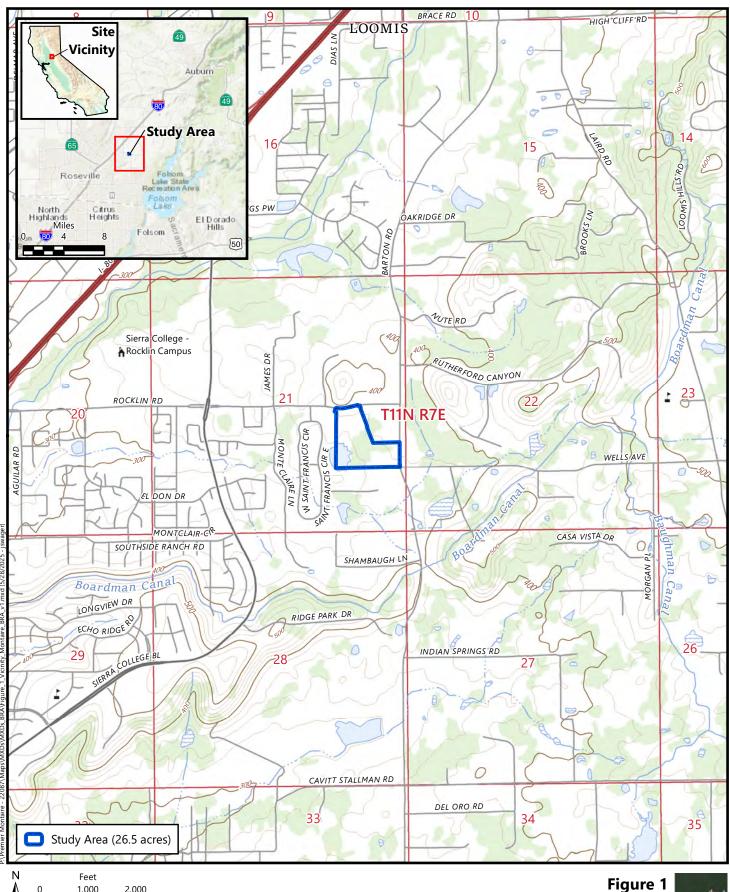
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Figures

- Figure 1. Site and Vicinity
- Figure 2. Project Detail
- Figure 3. California Natural Diversity Database Occurrences of Plant Species
- Figure 4. California Natural Diversity Database Occurrences of Wildlife Species and Critical Habitat
- Figure 5. Terrestrial Vegetation Communities and Aquatic Resources
- Figure 6. Natural Resource Conservation Service Soils
- Figure 7. Impacts to Terrestrial Vegetation Communities and Aquatic Resources





Site and Vicinity

Source: United States Geologic Survey, 2021 "Rocklin, California" 7.5-Minute Topographic Quadrangle Section 21, Township11 North, Range 7 East, MDBM Latitude (NAD83): 38.786425°, Longitude (NAD83): -121.194851°

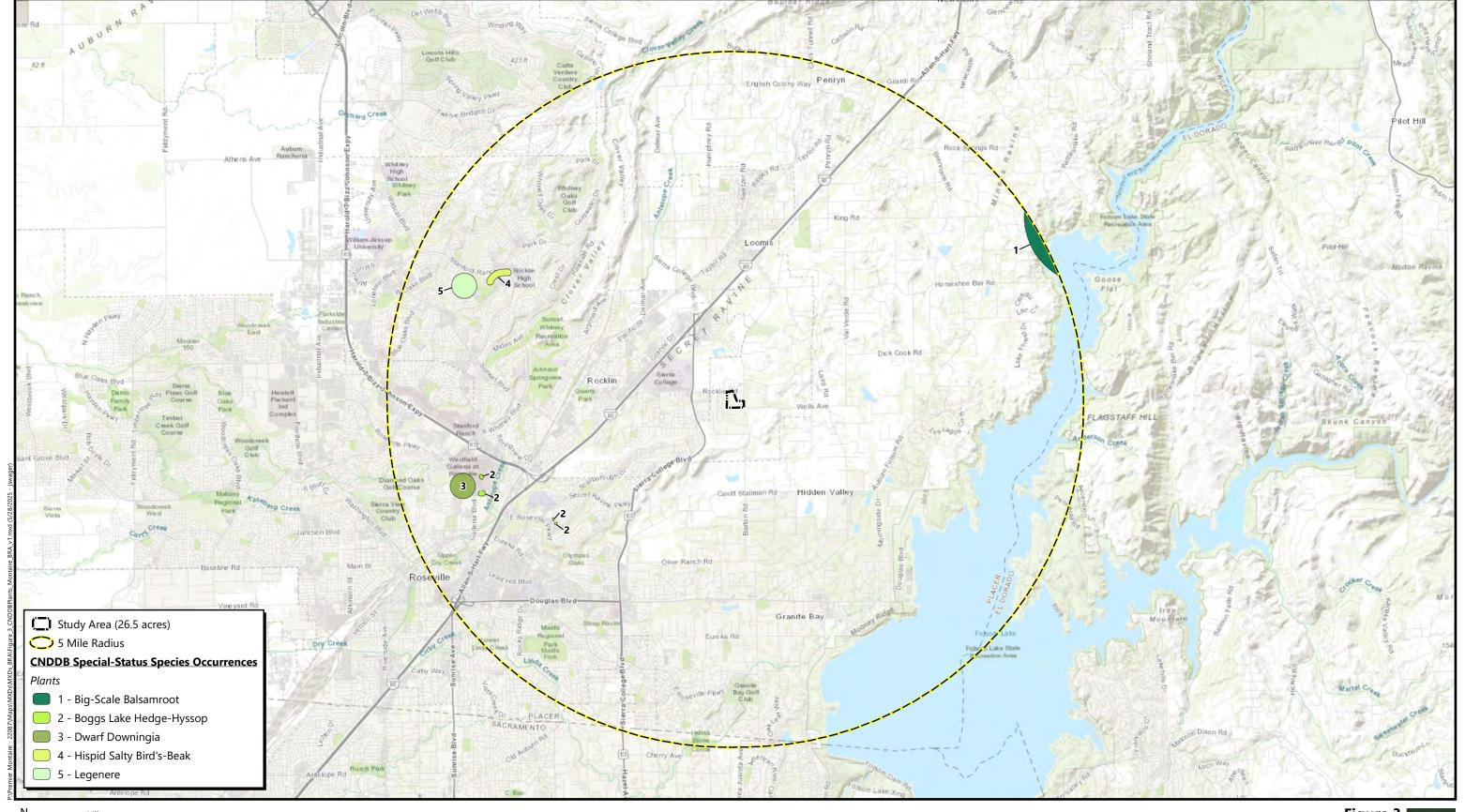


N Feet 100 200

Figure 2 Project Detail



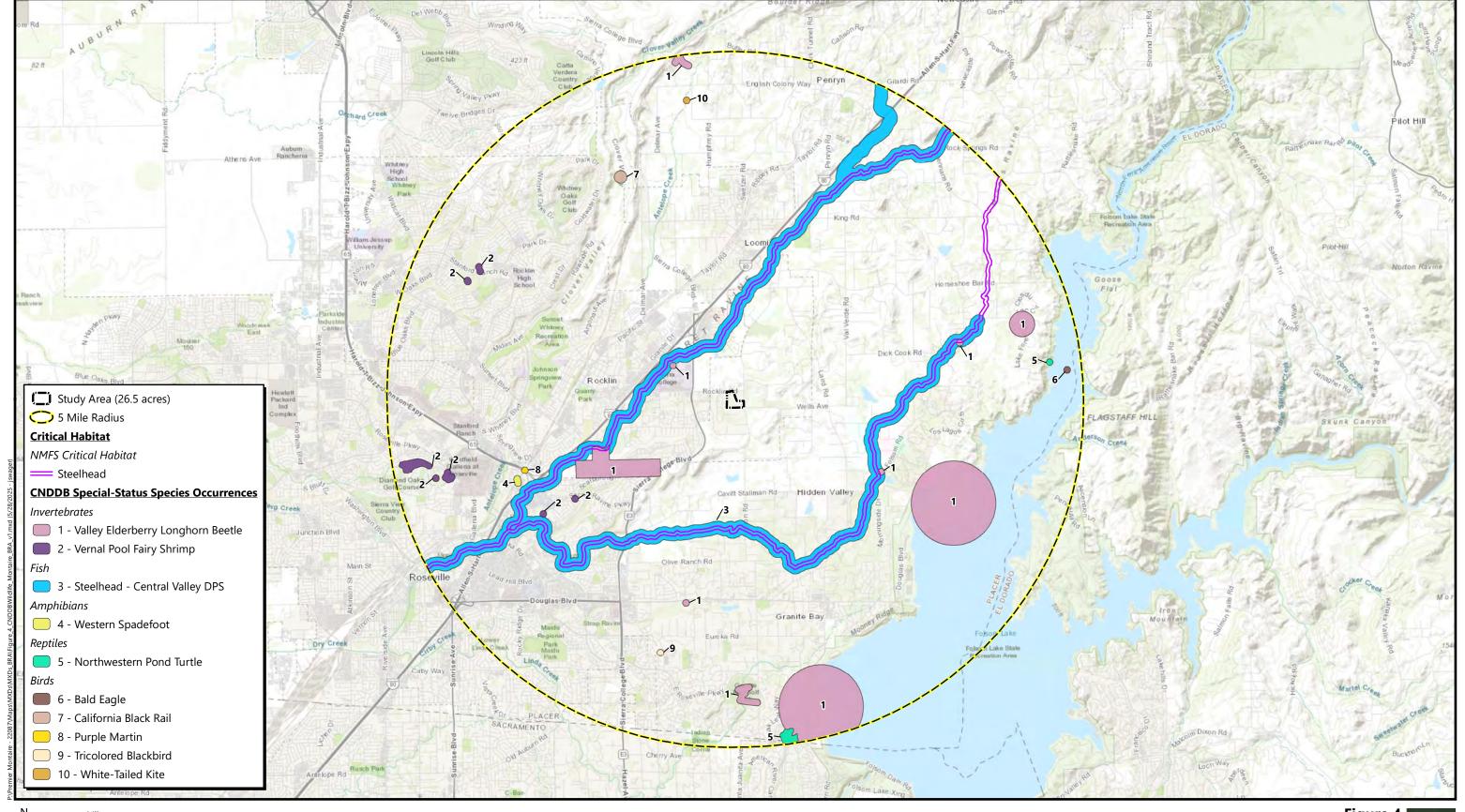
Design Source: TSD Engineering Aerial Source: City of Rocklin (NearMap), 2021 The Reserve Loomis, Placer County, California



N Miles

Figure 3
California Natural Diversity Database Occurrences
of Plant Species

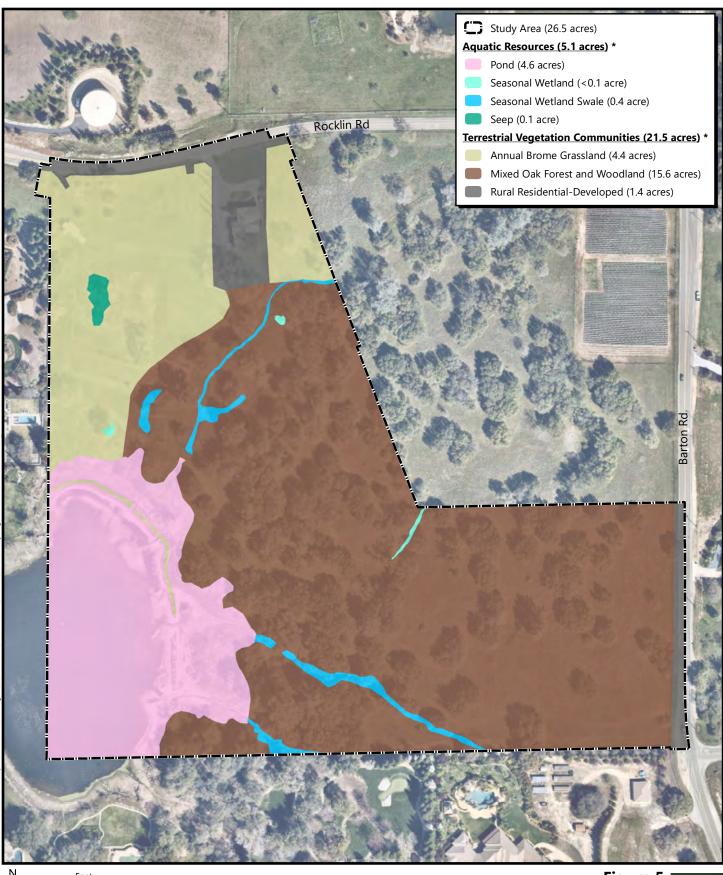


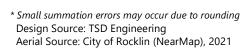


N Miles

Figure 4
California Natural Diversity Database Occurrences
of Wildlife Species and Critical Habitat





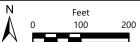


200

Figure 5
Terrestrial Vegetation Communities
and Aquatic Resources





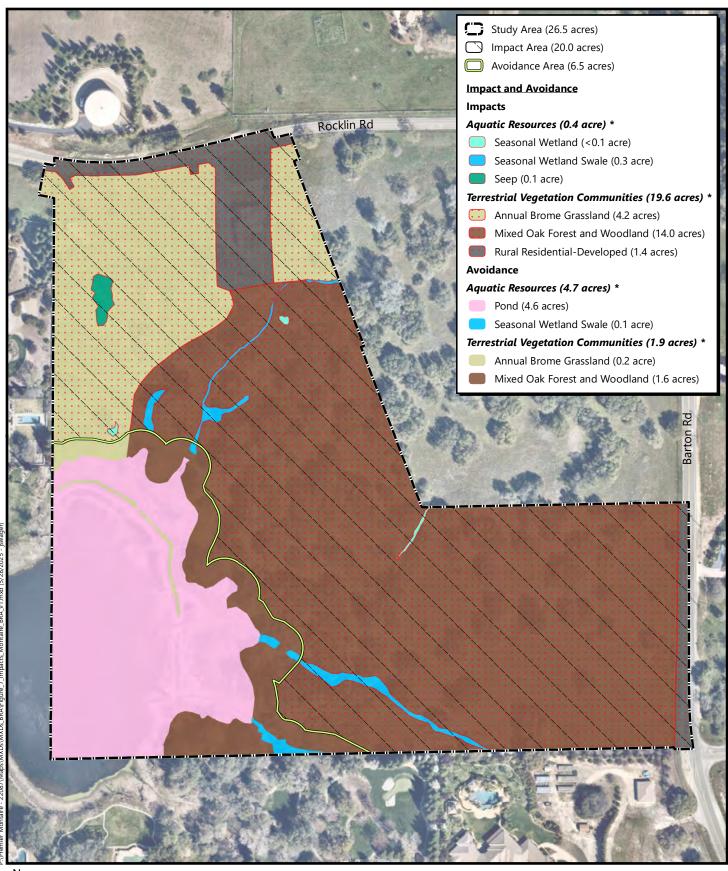


Soil Survey Source: USDA, Natural Resources Conservation Service Soil Survey Geographic (SSURGO) database for Placer County, California Aerial Source: City of Rocklin (NearMap), 2021

Figure 6 Natural Resources Conservation Service Soils



The Reserve Loomis, Placer County, California



Feet 0 100 200

Figure 7
Impacts to Terrestrial Vegetation Communities and Aquatic Resources



Attachments

Attachment A. IPaC Trust Resource Report for the Study Area

Attachment B. CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles

Attachment C. The Reserve Wildlife List

Attachment D. Approved Jurisdictional Determination for The Reserve

Attachment E. Tree Inventory Map

Attachment A

IPaC Trust Resource Report for the Study Area

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.

Location

Placer County, California



Local office

Sacramento Fish And Wildlife Office

414-6600

(916) 414-6713

Federal Building



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 species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

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

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

Northwestern Pond Turtle Actinemys marmorata

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/1111

Proposed Threatened

Amphibians

NAME STATUS

Western Spadefoot Spea hammondii

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/5425

Proposed Threatened

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Wherever found

There is **proposed** critical habitat for this species. Your location

does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/9743

Proposed Threatened

Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/7850

Threatened

Crustaceans

NAME STATUS

Vernal Pool Fairy Shrimp Branchinecta lynchi

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/498

Threatened

Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

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.

You are still required to determine if your project(s) may have effects on all above listed species. NSUL

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) 1. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservationmeasures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-goldeneagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the <u>National Bald Eagle Management Guidelines</u>. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to <u>Bald Eagle Nesting and Sensitivity to Human Activity</u>.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an <u>incidental take permit</u> may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the <u>Do I Need A Permit Tool</u>. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME BREEDING SEASON

Bald Eagle Haliaeetus leucocephalus

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.

Breeds Jan 1 to Aug 31

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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "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 (I)

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.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey, banding, and citizen science datasets</u> 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 an eagle (<u>Bald and Golden Eagle Protection Act</u> requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 line or no data line (red horizontal) 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 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 and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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.

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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.

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.

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.

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. SUL

Migratory birds

The Migratory Bird Treaty Act (MBTA) 1 prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

- 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:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-goldeneagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases <u>birds of concern</u>, including <u>Birds of Conservation</u> <u>Concern (BCC)</u>, in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the <u>Nationwide avoidance and minimization</u> <u>measures for birds</u> document, and any other project-specific avoidance and minimization measures suggested at the link <u>Measures for avoiding and minimizing impacts to birds</u> for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the <u>Supplemental Information on Migratory Birds and Eagles document</u>, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus 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.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi 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/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

California Thrasher Toxostoma redivivum

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

Breeds Jan 1 to Jul 31

Common Yellowthroat Geothlypis trichas sinuosa

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

Breeds May 20 to Jul 31

Lawrence's Goldfinch Spinus lawrencei

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

Breeds Mar 20 to Sep 20

https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius

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/8350

Breeds Apr 1 to Sep 15

Nuttall's Woodpecker Dryobates nuttallii

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

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656

Breeds Mar 15 to Jul 15

Olive-sided Flycatcher Contopus cooperi

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

Breeds May 20 to Aug 31

https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea

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/5513

Breeds Mar 1 to Sep 5

Tricolored Blackbird Agelaius tricolor

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

https://ecos.fws.gov/ecp/species/3910

Breeds Mar 15 to Aug 10

Western Screech-owl Megascops kennicottii cardonensis

This is a Bird of Conservation Concern (BCC) only in particular Bird

Conservation Regions (BCRs) in the continental USA

Breeds Mar 1 to Jun 30

Wrentit Chamaea fasciata

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

Breeds Mar 15 to Aug 10

Yellow-billed Magpie Pica nuttalli

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

https://ecos.fws.gov/ecp/species/9726

Breeds Apr 1 to Jul 31

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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "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 (1)

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.

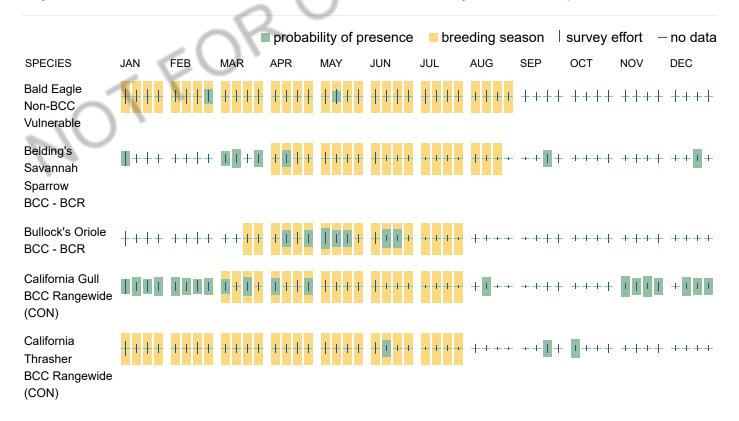
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.





Migratory Bird FAQs

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

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see

when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. <u>Additional measures</u> or <u>permits</u> 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 list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the <u>Bald and Golden Eagle Protection Act</u> and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey, banding, and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (<u>Bald and Golden Eagle Protection Act</u> 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, and to verify survey effort when no results present, please visit the <u>Rapid Avian Information Locator (RAIL) Tool</u>.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

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 to 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, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the <u>RAIL Tool</u> and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in

your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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 <u>Birds of Conservation Concern</u> (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 <u>Bald and Golden Eagle Protection Act</u> 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 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 BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

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 look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 does not represent all birds present in your project area. 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 and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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.

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.

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.

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.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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 (NWI)

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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.



Attachment B

CNPS Inventory of Rare and Endangered Plants Query for the "Rocklin, California" USGS Quadrangle and Eight Surrounding Quadrangles



CNPS Rare Plant Inventory

Search Results

35 matches found. Click on scientific name for details

Search Criteria: . Ouad is one of [3812172:3812173:3812182:3812181:3812171:3812161:3812161:3812163]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK		CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	РНОТО
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	None	None	G2	S2	1B.2	Yes	1994- 01-01	© 2019 Steven Perry
Allium sanbornii var. sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	None	None	G3T4?	S3S4	4.2		1994- 01-01	©2018 Steven Perry
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974- 01-01	©1998 Dean W Taylor
Brodiaea rosea ssp. vallicola	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	None	None	G4G5T3	S3	4.2	Yes	2019- 01-07	© 201 Stever
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar- Jun	None	None	G4	S4	4.2		1994- 01-01	No Pho
Calycadenia spicata	spicate calycadenia	Asteraceae	annual herb	May-Sep	None	None	G3?	S3	1B.3		2023- 04-05	© 202:

Bronny

Calystegia stebbinsii	Stebbins' morning- glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	FE	CE	G1	S1	1B.1	Yes	1980- 01-01	Steven Perry
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	2016- 06-06	© 2023 Steven Perry
Ceanothus roderickii	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	FE	CR	G1	S1	1B.1	Yes	1974- 01-01	No Photo Available
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	(Apr)May- Jun	None	None	G3	S3	1B.2	Yes	1974- 01-01	No Photo Available
Chloropyron molle ssp. hispidum	hispid salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	G2T1	S1	1B.1	Yes	1974- 01-01	No Photo Available
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Onagraceae	annual herb	(Mar)May- Jul	None	None	G4G5T4	S4	4.2	Yes	2001- 01-01	No Photo Available
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	Yes	2006- 09-29	No Photo Available
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	Apr-Aug	None	None	G2?Q	S2?	3.2	Yes	1974- 01-01	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980- 01-01	© 2013 Aaron Arthur
Eriophyllum jepsonii	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	None	None	G3	S 3	4.3	Yes	1974- 01-01	No Photo Available
Fremontodendron decumbens	Pine Hill flannelbush	Malvaceae	perennial evergreen	Apr-Jul	FE	CR	G1	S1	1B.2	Yes	1974- 01-01	*

Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980- 01-01	© 2016 Aaron Schusteff
Fritillaria eastwoodiae	Butte County fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3Q	\$3	3.2		1974- 01-01	©2009 Sierra Pacific Industries
Galium californicum ssp. sierrae	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	FE	CR	G5T1	S1	1B.2	Yes	1974- 01-01	© 2019 John Doyen
Gratiola heterosepala	Boggs Lake hedge- hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974- 01-01	©2004 Carol W. Witham
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar- May(Jun)	None	None	G3	S3	4.2	Yes	2006- 10-12	© 2014 Aaron Schusteff
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	Yes	1984- 01-01	© 2004 Carol W. Witham
Juncus leiospermus var. leiospermus	Red Bluff dwarf rush	Juncaceae	annual herb	Mar-Jun	None	None	G2T2	S2	1B.1	Yes	1974- 01-01	©2016

©2016 Dylan Neubauer

Lathyrus sulphureus var. argillaceus	dubious pea	Fabaceae	perennial herb	Apr-May	None	None	G5T1T2Q	S1S2	3	Yes	1994- 01-01	No Photo Available
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974- 01-01	©2000 John Game
Leptosiphon ambiguus	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Yes	1994- 01-01	© 2010 Aaron Schusteff
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994- 01-01	© 2007 Len Blumin
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	May- Jul(Aug)	None	None	G4T3	S3	4.2	Yes	1994- 01-01	© 2008 Sierra Pacific Industries
Navarretia myersii ssp. myersii	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	Yes	1994- 01-01	© 2020 Leigh Johnson
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr- Jul(Sep)	FE	CE	G1	S1	1B.1	Yes	1974- 01-01	© Rick York and CNPS
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	FT	CR	G2	S2	1B.2	Yes	1974- 01-01	Steve Tyron
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	None	None	G3	\$3	1B.2	Yes	1984- 01-01	©2013 Debra L. Cook

Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None None G4G5	S3	2B.3		1974- 01-01	© 2000 Tom
Wyethia reticulata	El Dorado County	Asteraceae	perennial herb	Apr-Aug	None None G2	S2	1B.2	Yes	1974- 01-01	Engstro
	mule ears									Stever Perry

Showing 1 to 35 of 35 entries

Go to top

Suggested Citation:

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California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 18 March 2025].

Attachment C

The Reserve Wildlife List

Wildlife Species Observed within The Reserve 1 May 2023 and 18 March 2025

Species Name	Common Name
Birds	
Branta canadensis	Canada Goose
Anas platyrhynchos	Mallard
Bucephala albeola	Bufflehead
Meleagris gallopavo	Wild Turkey
Phalacrocorax auritus	Double-crested Cormorant
Cathartes aura	Turkey Vulture
Buteo lineatus	Red-shouldered Hawk
Buteo jamaicensis	Red-tailed Hawk
Zenaida macroura	Mourning Dove
Calypte anna	Anna's Hummingbird
Megaceryle alcyon	Belted Kingfisher
Melanerpes formicivorus	Acorn Woodpecker
Picoides nuttallii	Nuttall's Woodpecker
Colaptes auratus	Northern Flicker
Sayornis nigricans	Black Phoebe
Aphelocoma californica	California Scrub-Jay
Corvus brachyrhynchos	American Crow
Corvus corax	Common Raven
Tachycineta bicolor	Tree Swallow
Stelgidopteryx serripennis	Northern Rough-winged Swallow
Baeolophus inornatus	Oak Titmouse
Psaltriparus minimus	Bushtit
Sitta carolinensis	White-breasted Nuthatch
Thryomanes bewickii	Bewick's Wren
Regulus calendula	Ruby-crowned Kinglet
Sialia mexicana	Western Bluebird
Turdus migratorius	American Robin
Mimus polyglottos	Northern Mockingbird
Sturnus vulgaris	European Starling
Setophaga coronata	Yellow-rumped Warbler
Pipilo maculatus	Spotted Towhee
Melozone crissalis	California Towhee
Melospiza melodia	Song Sparrow
Zonotrichia leucophrys	White-crowned Sparrow
Junco hyemalis	Dark-eyed Junco

The Reserve Page 1 of 2

Wildlife Species Observed within The Reserve 1 May 2023 and 18 March 2025

Species Name	Common Name
Birds, Continued	
Agelaius phoeniceus	Red-winged Blackbird
Euphagus cyanocephalus	Brewer's Blackbird
Carpodacus mexicanus	House Finch
Spinus psaltria	Lesser Goldfinch
Reptiles	
Unidentified Species	Turtle
Mammals	
Castor canadensis	Beaver
Sciurus griseus	Western Gray Squirrel
Odocoileus hemionus	Black-tailed Deer
Invertebrates	
Bombus species	Bumble Bee

The Reserve Page 2 of 2

Attachment D

Approved Jurisdictional Determination for The Reserve



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT 1325 J STREET SACRAMENTO CA 95814-2922

February 28, 2023

Regulatory Division (SPK-2022-00714)

Premier Homes, LLC. Attn: Mr. Stefan Horstschraer 8483 Douglas Plaza Dr. Granite Bay, California 95746-6820 stefan@premierhomesca.com

Dear Mr. Horstschraer:

We are responding to your December 13, 2022, request for a preliminary jurisdictional determination (JD) for the Premier Montaire site. The approximately 29-acre project site is located south of Rocklin Road and West of Barton Road, Latitude 38.786521°, Longitude -121.194838°, Loomis, Placer County, California.

Based on available information, we concur with your aquatic resources delineation for the site as depicted on the enclosed May 1, 2022, *Aquatic Resources* drawing prepared by Madrone Ecological Consulting (enclosure 1). The approximately 0.03 acre of seasonal wetland, 0.36 acre of seasonal wetland swale, 0.08 acre of seep, and 4.68 acres of pond present within the survey area are potential jurisdictional aquatic resources ("waters of the United States") regulated under Section 404 of the Clean Water Act. This letter verifies that the location and boundaries of wetlands were delineated consistent with the wetland definition at 33 CFR §328.3(c)(16), the 1987 *Corps of Engineers Wetlands Delineation Manual* (Wetlands Research Program Technical Report Y-87-1) and the applicable regional supplements; and the location and boundaries of non-tidal waters conform with the ordinary high water mark definition at 33 CFR §328.3(c)(7), Regulatory Guidance Letter 05-05, and any applicable regional guide.

At your request, we have completed a preliminary JD for the site. Enclosed find a copy of the *Preliminary Jurisdictional Determination Form* (enclosure 2). Please sign and return the completed form to the address listed below within 30 days of the date of this letter. If you do not return the signed form within 30 days, we will presume concurrence and finalize the preliminary jurisdictional determination.

We recommend you provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

You may request an approved JD for this site at any time prior to starting work within waters, including after a permit decision is made. To request an approved JD for this site, complete the attached *Request for Aquatic Resources Delineation or Jurisdictional Determination Form* (enclosure 3) and return it to this office at the address listed below. A *Notification of Appeal Process and Request for Appeal Form* is enclosed to notify you of your options with this determination (enclosure 4).

We appreciate feedback, especially about interactions with our staff and processes.

Please refer to identification number SPK-2022-00714 in any correspondence concerning this project. If you have any questions, please contact Kyler Walsh by email at kyler.j.walsh@usace.army.mil, or telephone at (916) 577-6704. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Kaitlyn A. Ames Senior Project Manager Special Projects Branch

Enclosures

CC:

Sarah VonderOhe, Madrone Ecological Consulting, LLC., SVonderOhe@madroneeco.com

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL							
Applicant: Premier Homes, LLC., Attn: Mr. Stefan Horstschraer File No.: SPK-2022-00714 Date: February 28, 2023							
Attached is:	See Section below						
INITIAL PROFFERED PERMIT (Standard Pe	Α						
PROFFERED PERMIT (Standard Permit	В						
PERMIT DENIAL	С						
APPROVED JURISDICTIONAL DETERM	D						
→ PRELIMINARY JURISDICTIONAL DETERMINARY	E						

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for
 final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized.
 Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and
 waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations
 associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for
 final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized.
 Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and
 waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations
 associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers
 Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer
 (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe to an initial proffered permit in clear concise statements. You may your reasons or objections are addressed in the administrative re	y attach additional information t	
ADDITIONAL INFORMATION: The appeal is limited to a review of		
record of the appeal conference or meeting, and any supplement needed to clarify the administrative record. Neither the appellant		
record. However, you may provide additional information to clarify		
administrative record.		•
POINT OF CONTACT FOR QUESTIONS OR INFORM		
If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regard also contact:	ling the appeal process you may
	Travis Morse	
U.S. Army Corps of Engineers 1325 J Street, Room 1350	Administrative Appeal Review U.S. Army Corps of Engineers	
Sacramento, CA 95814	South Pacific Division	5
	Phillip Burton Federal Building	g, Post Office Box 36023
Phone: (916) 577-6704, FAX 916-557-7803 Email: kyler.j.walsh@usace.army.mil	450 Golden Gate Avenue San Francisco, California 941	02
	Phone: 970-243-1199x1014,	FAX: 971-241-2358
RIGHT OF ENTRY: Your signature below grants the right of entry	Email: W.Travis.Morse@usac	
consultants, to conduct investigations of the project site during the		
day notice of any site investigation and will have the opportunity t		
	Date:	Telephone number:
Signature of appellant or agent.		

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 2023-02-23

- **B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Stefan Horstschraer, Premier Homes, LLC., 8483 Douglas Plaza Drive, Granite Bay, CA 95746-6820
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Premier Montaire, SPK-2022-00714
- D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
 (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: CA County/parish/borough: Placer County City: Loomis

Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.786521 Long.: -121.194838

Universal Transverse Mercator: 656786.41, 4294634.48

Name of nearest waterbody: Antelope Creek

Ε.	REVIEW PERFORMED FC	R SITE EVALUATION	(CHECK ALL THAT	APPLY)
----	---------------------	-------------------	-----------------	--------

\boxtimes	Office	(Desk)	Determination.	Date:	February	23,2023
-------------	--------	--------	----------------	-------	----------	---------

Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	resource (i.e., wetland vs. non-wetland waters)	
SW-1	38.786899	-121.19623	0.007	Wetland	Section 404
SW-2	38.78752	-121.19497	0.007	Wetland	Section 404
SW-3	38.786310	-121.19402	0.017	Wetland	Section 404
SWS-1	38.78701	-121.19595	0.036	Wetland	Section 404

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
SWS-2	38.78509	-121.19502	0.055	Wetland	Section 404
SWS-3	38.787212	-121.19530	0.105	Wetland	Section 404
SWS-4	38.785411	-121.19441	0.16	Wetland	Section 404
S-1	38.787662	-121.19630	0.078	Wetland	Section 404
P-1	38.785829	-121.19609	4.678	Wetland	Section 404

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:

Maps, plans, plots or plat submitted by or on benaif of the PJD requestor: Map: October 2022, Aquatic Resources Delineation Report, prepared by Madrone Ecological Consulting, Inc
☑ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale: .
☐ Data sheets prepared by the Corps: .
Corps navigable waters' study:
☑ U.S. Geological Survey Hydrologic Atlas: 1802011101 Dry Creek Watershed.
USGS NHD data.
USGS 8 and 12 digit HUC maps.
☑ U.S. Geological Survey map(s). Cite scale & quad name: Rocklin.
☑ Natural Resources Conservation Service Soil Survey. Citation: Soil Survey Source: USDA, Soil Conservation Service. Soil Survey Geographic (SSURGO) database for Placer County, California, Western Part. Arial Source: Maxar, 09 September 2021.
National wetlands inventory map(s). Cite name: National Wetlands Inventory Map, Dated August 17, 2022, retreived at https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.
☐ State/local wetland inventory map(s):
☐ 100-year Floodplain Elevation is: . (National Geodetic Vertical Datum of 1929)
Or Other (Name & Date):
Previous determination(s). File no. and date of response letter:
☑ Other information (please specify): USGS Topo Map NGA REF NO. USGSX24K3822.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

February 28, 2023

Signature and date of Regulatory staff member

completing PJD

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.





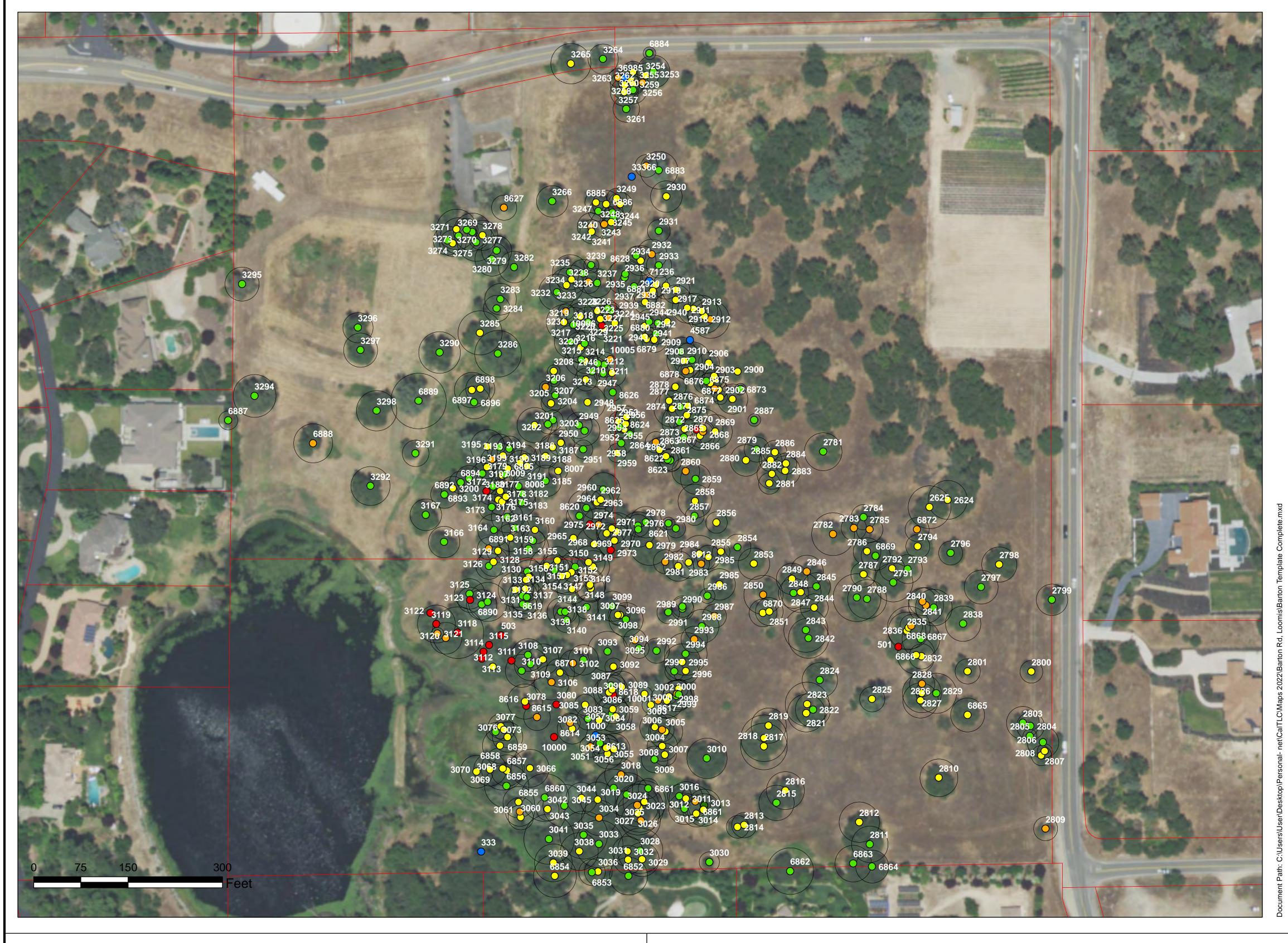
Figure 3 Aquatic Resources



Premier Montaire Town of Loomis, Placer County, California

Attachment E

Tree Inventory Map



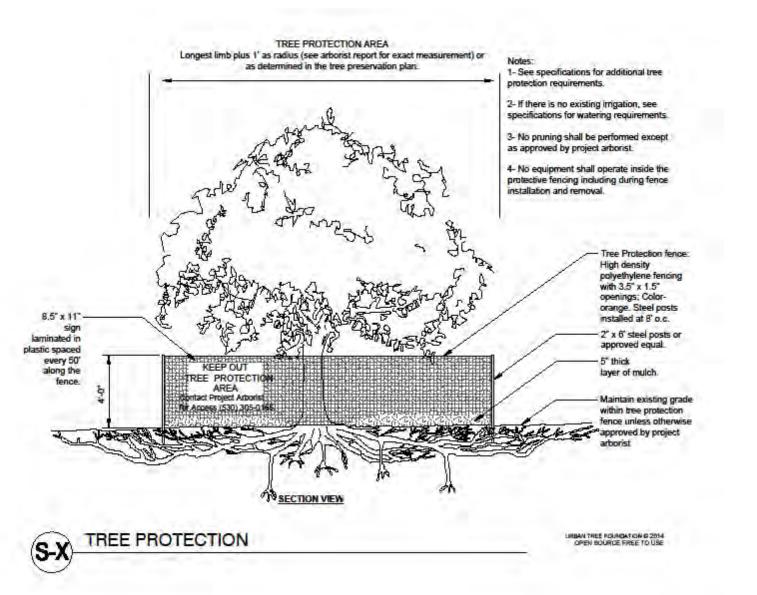


California Tree & Landscape Consulting, Inc.

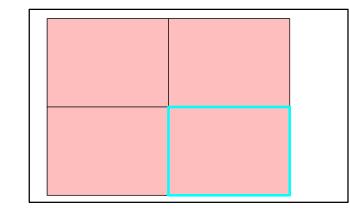
359 Nevada Street, Suite 201 Auburn, CA 95603

TREE PROTECTION GENERAL REQUIREMENTS

- The project arborist for this project is California Tree & Landscape Consulting. The
 primary contact information is Nicole Harrison (530) 305-0165. The project arborist may
 continue to provide expertise and make additional recommendations during the
 construction process if and when additional impacts occur or tree response is poor.
 Monitoring and construction oversight by the project arborist is recommended for all
 projects and required when a final letter of assessment is required by the jurisdiction.
- 2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
- 3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
- No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
- Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
- Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
- 7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
- 8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



TREE INVENTORY MAP



>Tree locations are approximate and were collected using apple iOS products.
>Property line information was downloaded from Placer County on 05/15/2020.
>Development plans provided by SGI Companies dated 09/17/2020.

Property Line

Arborist Rating

O Dead

I Extreme Structure or Health Problems

Z Major Structure or Health Problems

Arborist Rating

O Dead

I Extreme Structure or Health Problems

Arborist Rating

O Dead

Arborist Rating



PREMIER MONTAIRE

DDRESS 5

5500 Barton Road, Loomis, CA

Sheet No. TPP 1.0

ADDRESS 5780 Rocklin Road, Loomis, CA

Date: 9/7/2022

APPENDIX B

GEOTECHNICAL ENGINEERING STUDY

GEOTECHNICAL ENGINEERING STUDY FOR PREMIER MONTAIRE

5500 Barton Road Loomis, California

Project No. E22325.000 September 2022





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

Premier 40, LLC 8483 Douglas Plaza Drive Granite Bay, California 95746 Project No. E22325.000 6 September 2022

Attention: Stefan Horstschraer

Subject: PREMIER MONTAIRE

5500 Barton Road, Loomis, California GEOTECHNICAL ENGINEERING STUDY

References:

- 1. Site Plan for Loomis Basin Charter Option 1, prepared by Rainforth Grau Architects, dated 17 May 2022.
- 2. Proposal and Executed Contract for Barton Road Subdivision, prepared by Youngdahl Consulting Group, Inc., dated 2 August 2022.

Dear Mr. Horstschraer:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has prepared this geotechnical engineering study for the project site located at 5500 Barton Road in Loomis, California. The purpose of this study was to prepare a site-specific geotechnical report based on new information that can be incorporated into the design of the proposed site. To complete this task, our firm completed a subsurface exploration, laboratory testing, and prepared this report in accordance with the Reference 2 proposal and contract.

Based upon our observations, the geotechnical aspects of the site appear to be suitable for support of the proposed improvements provided the recommendations presented in this report are incorporated into the design and construction. Geotechnical conditions associated with the site development are anticipated to include processing existing grades for preparation to receive engineered fills, shallow equipment refusal, the placement of engineered fills, and improvements for drainage controls.

Due to the non-uniform nature of soils, other geotechnical issues may become more apparent during grading operations which are not listed above. The descriptions, findings, conclusions, and recommendations provided in this report are formulated as a whole; specific conclusions or recommendations should not be derived or used out of context. Please review the limitations and uniformity of conditions section of this report.

This report has been prepared for the exclusive use of the addressee of this report and their consultants, for specific application to this project, in accordance with generally accepted geotechnical engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,

Youngdahl Consulting Group, Inc.

Pavel Fomin
Staff Engineer

Distribution: PDF to Client

John Youngdahl, P.E. Principal Engineer

9-6-22

NO. C60224 Exp. 06-30-22

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GEOTECHNICAL ENGINEERING STUDY FOR PREMIER MONTAIRE

1.0 INTRODUCTION

This report presents the results of our geotechnical engineering study performed for the proposed improvements planned to be constructed at 5500 Barton Road in Rocklin, California. The vicinity map provided on Figure A-1, Appendix A shows the approximate project location.

Project Understanding

We understand that the proposed development will consist of the construction of residential subdivision. We anticipate that the single-family residences will be one- to two-stories, of wood frame construction, and supported by conventional shallow foundations with concrete slab-on-grade floors. Appurtenant construction is expected to include underground utilities, roadways, site retaining walls, and improvements for drainage.

Background

Based on a review of aerial photography, the site appears to have been mostly undeveloped with the exception of a man-made pond developed during the 1950's in the southwest portion of the site, a single residence developed during the early 1980's in the northwest portion of the site, and a relatively small agricultural plot in the northeastern corner developed in the early 2000's. Surface disturbances were observed in 2007 which generally resulted in a fill stockpile north of the pond and are anticipated to be from the grading operations of a bordering property, north of Rocklin Road.

If studies or plans pertaining to the site exist and are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

Purpose and Scope

Youngdahl Consulting Group, Inc. has prepared this report to provide geotechnical engineering recommendations and considerations for incorporation into the design and development of the site. The following scope of services were developed and performed for preparation of this report:

- A review of geotechnical and geologic data available to us at the time of our study;
- Performance of a field study consisting of a site reconnaissance and subsurface exploration to observe and characterize the subsurface conditions;
- Laboratory testing on representative samples collected during our field study;
- Evaluation of the data and information obtained from our field study, laboratory testing, and literature review for geotechnical conditions;
- Development of the following geotechnical recommendations and considerations regarding earthwork construction including, site preparation and grading, engineered fill criteria, seasonal moisture conditions, excavation characteristics, and drainage;
- Development of geotechnical design criteria for code-based seismicity, foundations, slabs on grade, and retaining walls:
- Preparation of this report summarizing our findings, conclusions, and recommendations regarding the above-described information.



2.0 SITE CONDITIONS

The following section describes our findings regarding the site conditions that we observed during our site reconnaissance and subsequent subsurface exploration.

Surface Observations

The project site is located at 5500 Barton Road in Loomis, California and is bounded by Barton Road to the east, single residences to the south and west, a pond to the southwest, and Rocklin Road to the north. Topography at the site generally consists of relatively gentle undulating terrain sloping to the southwest. A creek runs the from the north to the southwest into the existing pond. At the time of our visit, the vegetation at the site consisted of seasonal grasses with scattered trees and water-loving shrubs along the creek and pond. A large approximately fifteen foot high and one hundred foot long, non-engineered stockpile is located on the western region of the site, north of the pond.

Subsurface Conditions

Our field study included a site reconnaissance by a representative of our firm followed by a subsurface exploration program conducted on 2 July 2021. The exploration program included the excavation of eleven exploratory test pits under the direction of our representative at the approximate locations shown on Figure A-2, Appendix A.

Subsurface soil conditions at the project site primarily included sands and occasional silts overlying relatively shallow bedrock. The upper soil layers were generally observed to be medium dense or medium stiff to depths up to approximately 1.5 feet below the existing ground surface. Weathered bedrock was typically encountered within approximately 0.5 to 2 feet below existing ground surface and was observed to be in a highly weathered and soft to very hard condition. The fill stockpile consisted of clayey sands and sandy silts with clay. The fill stock pile and some residual surface fills were encountered in Test Pits 5 and 6, respectively.

A more detailed description of the subsurface conditions encountered during our subsurface exploration is presented graphically on the "Exploratory Test Pit Logs", Figures A-3 through A-8, Appendix A. These logs show a graphic interpretation of the subsurface profile, and the location and depths at which samples were collected.

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 rock, perched water is common to the area and could be encountered during grading operations. We did not observe perched water during our recent subsurface exploration program. The presence of perched water can vary because of many factors such as, the proximity to rock, topographic elevations, and the presence of utility trenches. 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 GEOTECHNICAL SOIL CHARACTERISTICS

The geotechnical soil characteristics presented in this section of the report are based on laboratory testing from previous studies and observation of samples collected from subsurface soils.

Laboratory Testing

Laboratory testing of the collected samples was directed towards determining the physical and engineering properties of the soil underlying the site. The 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-4 @ 0-1.5' Φ = 40.8°, c = 25 psf (90%)		
Maximum Dry Density	ASTM D1557	TP-4 @ 0-1.5' DD = 121.1 pcf, MC = 8.9		
Resistance "R" Value	CTM 301	TP-1 @ 0-2'	R = 67	
Expansion Index	ASTM D4829	TP-5 @ 4-10' EI = 61 (Medium Potenti		
Corrosivity Suite	CA DOT Tests 417, 422 and 643	See Soil Corrosivity Section		

Soil Expansion Potential

The native materials encountered in our explorations were generally non-plastic (rock, sand, and non-plastic silt). The non-plastic materials are generally considered to be non-expansive; therefore, we do not anticipate that special design considerations for expansive soils will be necessary for the design or construction of the proposed improvements. The stockpiled previously imported material was sampled and tested for expansion potential. Our results showed a medium potential for expansion with an expansion index (EI) of 61. These clays can cause damage to shallow rigid improvements if deposited in concentration. We have prepared recommendations to address the clay by either blending or disposal in non-structural areas. If necessary, further recommendations can be made based on our observations at the time of construction should more expansive soils be encountered at the project site which were not encountered during our study.

Soil Corrosivity

A corrosivity testing suite consisting of soil pH, resistivity, sulfate, and chloride content tests were performed on selected soil samples collected during our site exploration. We are not corrosion specialists and recommend that the results be evaluated by a qualified corrosion expert. The laboratory test results (provided by Sunland Analytical) are provided in Appendix B and are summarized in Table 2, below.

Table 2: Corrosivity Summary

Location	Depth (ft)	Soil pH	Minimum Resistivity ohm-cm (x1000)	Chloride (ppm)	Sulfate (ppm)	Caltrans Environment	ACI Environment
TP-2	2-3	5.25	14.74	3.0	1.5	Non-Corrosive	S0 (Not a Concern)

According to Caltrans Corrosion Guidelines Version 3.2, May 2021, the test results, specifically soil pH, appear to indicate a potential corrosive environment for structural elements. According to the 2019 California Building Code Section 1904.1 and ACI 318-14 Table 19.3.1.1, the test results indicate the onsite soils have a negligible potential for sulfide attack of concrete. A certified corrosion engineer should be consulted to review the above tests and site conditions in order to develop specific mitigation recommendations if metallic pipes or structural elements are designed to be in contact with or buried in soil.



4.0 GEOLOGY AND SEISMICITY

The geologic portion of this report includes a review of geologic data pertinent to the site based on an interpretation of our observations of the surface exposures and our observations in our exploratory test pits.

Geologic Conditions

According to the Geologic Map of the South Half of the Auburn 15-Minute Quadrangle (F.H. Olmsted, 1971), the subject property and vicinity are underlain by quartz diorite of the Penryn Pluton.

Seismicity

Our evaluation of seismicity for the project site included reviewing existing fault maps and obtaining seismic design parameters from the USGS online calculators and databases. For the purpose of this study, we used a latitude and longitude of 38.786621, -121.194939 to identify the project site.

Alguist-Priolo Regulatory Faults

Based upon the records currently available from the California Department of Conservation, the project site is not located within an Alquist-Priolo Regulatory Review Zone and there are no known faults located at the subject site. We do not anticipate special design or construction requirements for faulting at this project site.

Code Based Seismic Criteria

Based upon the subsurface conditions encountered during our study and our experience in the area, the site should be classified as Site Class C. The final choice of design parameters remains the purview of the project structural engineer.

Table 3: Seismic Design Parameters*

Reference		Seismic Parameter	Recommended Value
9	Table 20.3-1	Site Class	С
E 7-1	Figure 22-7	Maximum Considered Earthquake Geometric Mean (MCEC) PGA	0.183g
ASCE	Table 11.8-1	Site Coefficient F _{PGA}	1.217
⋖	Equation 11.8-1	$PGA_M = F_{PGA} PGA$	0.222g
	Figure 1613.2.1(1)	gure 1613.2.1(1) Short-Period MCE at 0.2s, Ss	
	Figure 1613.2.1(2) 1.0s Period MCE, S ₁		0.216g
	Table 1613.2.3(1)	Site Coefficient, Fa	1.300
ပ	Table 1613.2.3(2)	Site Coefficient, F _v	1.500
CB(Equation 16-36	Adjusted MCE Spectral Response Parameters, S _{MS} = F _a S _s	0.555g
0 6	Equation 16-37	Equation 16-37 Adjusted MCE Spectral Response Parameters, $S_{M1} = F_v S_1$	
0	Equation 16-38	Design Spectral Acceleration Parameters, S _{DS} = ² / ₃ S _{MS}	0.370g
2	Equation 16-39	Design Spectral Acceleration Parameters, S _{D1} = ² / ₃ S _{M1}	0.216g
	Table 1613.2.5(1)	Seismic Design Category (Short Period), Occupancy I to III	С
	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

^{*}Based on the online calculator available at https://earthquake.usgs.gov/ws/designmaps/

Earthquake Induced Liquefaction, Settlement, and Surface Rupture Potential

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated,



loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading.

Due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to rock, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered low. For the above-mentioned reasons mitigation for these potential hazards is not considered necessary for the development of this project.

Static and Seismically Induced Slope Instability

The existing slopes on the project site were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and no apparent tension cracks or slump blocks in the slope face or at the head of the slope. No other indications of slope instability such as seeps or springs were observed. Additionally, due to the absence of permanently elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to bedrock, the potential for seismically induced slope instability for the existing slopes is considered low.

5.0 DISCUSSION AND CONCLUSIONS

Based upon the results of our field explorations, findings, and analysis described above, it is our opinion that construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained in this report are incorporated into the design plans, specifications, and implemented during construction. The native soils, once processed and compacted as recommended below, may be considered "engineered" and suitable for support of the planned improvements.

Geotechnical Considerations for Development

The project site is generally comprised of a thin layer of soils over shallow rock which is considered suitable for support of the proposed improvements. Generally, issues associated with development on similar sites are associated with the excavation of shallow rock and the presence of seepage at the soil to rock contact. The geotechnical recommendations for this project are presented in the following sections. *The non-engineered fill stockpile on site will need to be addressed according to Section 6 of this report.*

6.0 SITE GRADING AND EARTHWORK IMPROVEMENTS Excavation Characteristics

Exploratory test pits were excavated using a John Deere 410G equipped with a 12-inch-wide bucket. The degree of difficulty encountered in excavating our test pits is an indication of the effort that will be required for excavation during construction. Site soils were observed to be approximately 0.5- to 1-foot-thick overlying the bedrock horizon in various weathered conditions. The John Deere 410G was able to excavate between approximately 3 to 7 feet into bedrock materials before meeting practical refusal.

Where hard rock cuts in fractured rock are proposed, the orientation and direction of ripping will likely play a large role in the rippability of the material. When hard rock is encountered, we should be contacted to provide additional recommendations prior to performing an alternative such as blasting.

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 likely to be experienced in all but the driest summer and fall months.

Soil Moisture Considerations

The compaction of soil to a desired relative compaction is dependent on conditioning the soil to a target range of moisture content. Moisture contents that are excessively dry or wet could limit the ability of the contractor to compact soils to the requirements for engineered fill. When dry, moisture should be added to the soil and the soils blended to improve consistency. Wet soil will need to be dried to become compactable. Generally, this includes blending and working the soil to avoid trapping moisture below a dryer surficial crust. Other options are available to reduce the time involved but typically have higher costs and require more evaluation prior to implementation.

The largest contributor to excessive soil moisture is generally precipitation and seepage during the rainy season. In recognition of this, we suggest that consideration be given to the seasonal limitations and costs of winter grading operations on the site. Special attention should be given regarding the drainage of the project site. If the project is expected to work through the wet season, the contractor should install appropriate temporary drainage systems at the construction site and should minimize traffic over exposed subgrades due to the moisture-sensitive nature of the on-site soils. During wet weather operations, the soil should be graded to drain and should be sealed by rubber tire rolling to minimize water infiltration.

Site Preparation

Preparation of the project site should involve site drainage controls, dust control, clearing and stripping, overexcavation and compaction of non-engineered fill or loose/soft soils, and exposed grade compaction considerations. The following paragraphs state our geotechnical comments and recommendations concerning site preparation.

Site Drainage Controls

We recommend that initial site preparation involve intercepting and diverting any potential sources of surface or near-surface water within the construction zones. Because the selection of an appropriate drainage system will depend on the water quantity, season, weather conditions, construction sequence, and methods used by the contractor, final decisions regarding drainage systems are best made in the field at the time of construction. All drainage and/or water diversion performed for the site should be in accordance with the Clean Water Act and applicable Storm Water Pollution Prevention Plan.

Dust Control

Dust control provisions should be provided for as required by the local jurisdiction's grading ordinance (i.e., water truck or other adequate water supply during grading). Dust control is the purview of the grading contractor.

Clearing and Stripping of Organic Materials

Clearing and stripping operations should include the removal of all organic laden materials including trees, bushes, root balls, root systems, and any soft or loose soil generated by the removal operations. Short or mowed dry grasses may be pulverized and lost within fill materials provided no concentrated pockets of organics result. It is the responsibility of the grading contractor to remove excess organics from the fill materials. No more than 2 percent of organic material, by weight, should be allowed within the fill materials at any given location. Preserved trees may require tree root protection which should be addressed on an individual basis by a qualified arborist.



Our recommendations are based on limited windows into the surface and interpretations thereof; therefore, a representative of our firm should be present during site clearing operations to identify the location and depth of potential fills or loose soils, some of which may not have been found during our evaluation. We should also be present to observe removal of deleterious materials, and to identify any existing site conditions which may require mitigation or further recommendations prior to site development.

Overexcavation and Compaction of Non-Engineered Fill or Loose/Soft Native Soils

Following general site clearing, all existing non-engineered fill (including fill stockpile), loose/soft or saturated native soils within the development footprint should be overexcavated down to firm native materials and backfilled with engineered fill as detailed in the engineered fill section below.

Based on our explorations, the stockpile located on the western portion of the site varies in height to a maximum of about 15 feet thick and is composed of clayey soils, not otherwise encountered at the project site. These soils can cause differential foundation movement if compacted in concentration in future building pad or rigid improvement areas. At the time of this report, a grading plan was not available for review to see where cut and fills are proposed. We recommend placing this stockpiled soil as an engineered fill in future landscape areas where foundations and rigid improvements are not anticipated. As an alternative, these soils could be blended with the sandy native soils such that their expansion properties are diminished. This could be performed in deeper roadway fills if available during mass grading. It is preferable that these materials be blended with proposed fills in the road areas below 18 inches from rough subgrade to avoid having to design the road section for the altered R-Value of the blended soil conditions. If the blended fills are placed in building pad areas, we recommend that the top 3 feet of the building pads be composed of non-expansive soils (no blended soils unless new expansion index testing of the blended soils results in very low expansive results).

Based on our interpretation, the areas with a thinner layer of loose surface soils appear to be associated with the stockpiled material previously imported and within the existing creek bed and the surrounding area. It may also be possible that the area of the former residences at the north side of the site may have loose soils. Any depressions extending below final grade resulting from the removal of fill materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill.

Exposed Grade Compaction

Exposed soil grades following initial site preparation activities and overexcavation operations should be scarified to a minimum depth of 8 inches and compacted to the requirements for engineered fill. Generally, where rock conditions are exposed, no scarification should be necessary; however, these surfaces should be moisture conditioned and compacted to mitigate disturbance resulting from site preparation. Prior to placing fill, the exposed grades should be in a firm and unyielding state. Any localized zones of soft or pumping soils observed within the exposed grade should either be scarified and recompacted or be overexcavated and replaced with engineered fill as detailed in the engineered fill section below.

Engineered Fill Criteria

All materials placed as fills on the site should be placed as "Engineered Fill" which is observed, tested, and compacted as described in the following paragraphs.

Suitability of Onsite Materials

We expect that soil generated from excavations on the site, excluding deleterious material, may be used as engineered fill provided the material does not exceed 8 inches in maximum dimension.

ASTM D2041 or CTM 309



Oversized rock fragments should be mechanically reduced in size or exported to an offsite location.

Fill Placement and Compaction

Engineered fills should be placed in thin horizontal lifts not to exceed 8 inches in uncompacted thickness. If the contractor can achieve the recommended relative compaction using thicker lifts, the method may be judged acceptable based on field verification by a representative of our firm using standard density testing procedures. Lightweight compaction equipment may require thinner lifts to achieve the recommended relative compaction. The following table presents the recommended relative compaction for various aspects of the project.

Fill Materials Minimum Relative Compaction Method Engineered Fill, General 90 percent **ASTM D1557** Engineered Fill > 10' Below 95 percent **ASTM D1557** Finished Grade Utility Trench Backfill* 95 percent **ASTM D1557** Subgrade 95 percent **ASTM D1557** Aggregate Baserock Grade 95 percent ASTM D1557

92 to 96 percent

Table 4: Recommended Relative Compaction

Asphalt Concrete Pavement

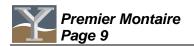
Depending on the moisture condition of the soils, the engineered fills may require moisture conditioning to be within a suitable compaction range. Our firm should be requested for consultation, observation, and testing for the earthwork operations prior to the placement of any fills. Fill soil compaction should be evaluated by means of in-place density tests performed during fill placement so that adequacy of soil compaction efforts may be determined as earthwork progresses.

Import Materials

The recommendations presented in this report are based on the assumption that the import materials will be similar to the materials present at the project site. High quality materials are preferred for import; however, these materials can be more dependent on source availability. Import material should be approved by our firm prior to transporting it to the project site.

Material for this project should consist of a material with the geotechnical characteristics presented below. If these requirements are not met, additional testing and evaluation may be necessary to determine the appropriate design parameters for foundations, pavement, and other improvements.

^{*} Unless otherwise noted by the governing agency.



Behavior Property	Reference Document	Recommendation
Direct Shear Strength	ASTM D3080	≥ 36° when compacted
Resistance Value	CTM 301	≥ 40
Plasticity Index	ASTM D4318	≤ 12
Expansion Index	ASTM D4829	≤ 20
Sieve Analysis	ASTM D1140	Not more than 30% Passing the No. 200 sieve
Maximum Aggregate Size	ASTM D1140	≤ 6"

Slope Configuration and Grading

Generally, a cut slope orientation of 2H:1V (Horizontal:Vertical) is considered stable with the material types encountered on the site. A fill slope constructed at the same orientation is considered stable if compacted to the engineered fill recommendations as stated in the recommendations section of this report. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Placement of Fills on Slopes

Placement of fill material on natural slopes should be stabilized by means of keyways and benches. Where the slope of the original ground equals or exceeds 5H:1V, a keyway should be constructed at the base of the fill. The keyway should consist of a trench excavated to a depth of at least 2 feet into firm, competent materials. The keyway trench should be at least 10 feet wide or as designated by our firm based on the conditions at the time of construction. Benches should be cut into the original slope as the filling operation proceeds. Each bench should consist of a level surface excavated at least 6 feet horizontally into firm soils or 4 feet horizontally into rock. The rise between successive benches should not exceed 36 inches. The need for subdrainage should be evaluated at the time of construction. Refer to Figure C-1 in Appendix C for typical keyway and bench construction.

Slope Face Compaction

All slope fills should be laterally overbuilt and cut back such that the required compaction is achieved at the proposed finish slope face. As a less preferable alternative, the slope face could be track walked or compacted with a wheel. If this second alternative is used, additional slope maintenance may be necessary.

Slope Drainage

Surface drainage should not be allowed to flow uncontrolled over any slope face. Adequate surface drainage control should be designed by the project civil engineer in accordance with the latest applicable edition of the CBC. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Underground Improvements

Trench Excavation

Trenches or excavations in soil should be shored or sloped back in accordance with current OSHA regulations prior to persons entering them. Where clay rind in combination with moist conditions is encountered in fractured bedrock, the project engineering geologist should be consulted for appropriate mitigation measures. The potential use of a shield to protect workers cannot be precluded.



Backfill Materials

Backfill materials for utilities should conform to the requirements of the local jurisdiction. It should be realized that permeable backfill materials will likely carry water at some time in the future.

When backfilling within structural footprints, compacted low permeability materials are recommended to be used a minimum of 5 feet beyond the structural footprint to minimize moisture intrusion. If the materials are too rocky, they may need to be screened prior to backfill in order to limit pipe damage. If a permeable material is used as backfill within this zone, subdrainage mitigation may be required. In addition, if the structure is oriented below the roadway and associated utilities, grout cutoffs and/or plug and drains around all utility penetrations are useful to keep moisture out from underneath the structure.

Backfill Compaction

Backfill compaction should conform to the requirements of the local jurisdiction. Where backfill compaction is not specified by the local jurisdiction, the backfill should be compacted to a minimum of 90 percent relative compaction per the ASTM D1557 test method. Compaction should be accomplished using lifts which do not exceed 12 inches when compacting with a backhoe or larger equipment equipped with a compaction wheel. However, thickness of the lifts should be determined by the contractor. If the contractor can achieve the required compaction using thicker lifts, the method may be judged acceptable based on field verification by a representative of our firm using standard density testing procedures. Lightweight compaction equipment may require thinner lifts to achieve the required densities.

Drainage Considerations

In developments with the potential for a perched groundwater condition (i.e., shallow bedrock), underground utilities can become collection points for subsurface water. Due to this condition, we recommend plug and drains within the utility trenches (Figure C-2, Appendix C) to collect and convey water to the storm drain system or other approved outlet. Temporary dewatering measures may be necessary and could include the installation of submersible pumps and/or point wells. Plug and drain systems should not be used in storm drainage systems that are designed to hold water during storm events as this could cause backflow into the trench backfills.

7.0 DESIGN RECOMMENDATIONS

The contents of this section include recommendations for foundations, slabs-on-grade, retaining walls, pavements, and drainage.

Shallow Conventional Foundations

Shallow conventional foundation systems are considered suitable for construction of the planned improvements, provided that the site is prepared in accordance with the recommendations discussed in Section 6.0 of this report.

The provided values do not constitute a structural design of foundations which should be performed by the structural engineer. In addition to the provided recommendations, foundation design and construction should conform to applicable sections of the 2019 California Building Code.

Foundation Capacities

The foundation bearing and lateral capacities are presented in the table below. The allowable bearing capacity is for support of dead plus live loads based on the foundation configuration presented in this report. The allowable capacity may be increased by 1/3 for short-term wind and seismic loads. Lateral forces on structures may be resisted by passive pressure acting against

the sides of shallow footings and/or friction between the foundation bearing material and the bottom of the footing. Section 1806.3 of the 2019 CBC allows for the combination of the friction factor and passive resistance value to lateral resistance. Consideration should be given to ignoring passive resistance where soils could be disturbed later or within 6 feet horizontally of the slope face.

Table 6: Foundation Capacities

Soil Type	Design Condition	Design Value	Applied Factor of Safety
Engineered Fill or Firm Native Soil	Allowable Bearing Capacity	2,500 psf	3.0
	Allowable Friction Factor*	0.45	1.5
	Allowable Passive Resistance	280 psf/ft	1.5
	Allowable Bearing Capacity	4,000 psf	3.0
Rock	Allowable Friction Factor*	0.50	1.5
	Allowable Passive Resistance	350 psf/ft	1.5
* Friction Factor is calcula	ated as tan(φ)		

Foundation Settlement

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. The settlement criteria are based upon the assumption that foundations will be sized and loaded in accordance with the recommendations in this report.

Foundation Configuration

Conventional shallow foundations should be a minimum of 12 inches wide and founded a minimum of 12 inches below the lowest adjacent soil grade for one- and two-story slab-on-grade residences and 18 inches for foundations supporting a second floor (e.g., two-story with raised wood floors). Isolated pad foundations should be a minimum of 24 inches in plan dimension. A grade beam, having the same depth as the continuous footings, should also be cast across the vehicle openings of the residence garage.

Foundation reinforcement should be provided by the structural engineer. The reinforcement schedule should account for typical construction issues such as load consideration, concrete cracking, and the presence of isolated irregularities. At a minimum, we recommend that continuous footing foundations for single family residences be reinforced with two No. 4 reinforcing bars, one located near the bottom of the footing and one near the top of the stem wall.

Foundation Influence Line and Slope Setback

All footings should be founded below an imaginary 2H:1V plane projected up from the bottoms of adjacent footings and/or parallel utility trenches, or to a depth that achieves a minimum horizontal clearance of 6 feet from the outside toe of the footings to the slope face, whichever requires a deeper excavation.

Subgrade Conditions

Footings should never be cast atop soft, loose, organic, slough, debris, nor atop subgrades covered by ice or standing water. A representative of our firm should be retained to observe all subgrades during footing excavations and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.



Shallow Footing / Stemwall Backfill

All footing/stemwall backfill soil should be compacted to the criteria for engineered fill as recommended in Section 6.0 of this report.

Slab-on-Grade Construction

It is our opinion that soil-supported slab-on-grade floors could be used for the main floor of the structure, contingent on proper subgrade preparation. Often the geotechnical issues regarding the use of slab-on-grade floors include proper soil support and subgrade preparation, proper transfer of loads through the slab underlayment materials to the subgrade soils, and the anticipated presence or absence of moisture at or above the subgrade level. We offer the following comments and recommendations concerning support of slab-on-grade floors. The slab design (concrete mix design, curing procedures, reinforcement, joint spacing, moisture protection, and underlayment materials) is the purview of the project Structural Engineer.

Slab Subgrade Preparation

All subgrades proposed to support slab-on-grade floors should be prepared and compacted to the requirements of engineered fill as discussed in Section 6.0 of this report.

Slab Underlayment

As a minimum for slab support conditions, the slab should be underlain by a minimum 4-inch-thick crushed rock layer that is covered by a minimum 10-mil thick moisture retarding plastic membrane. The membrane may only be functional when it is above the vapor sources. The bottom of the crushed rock layer should be above the exterior grade to act as a capillary break and not a reservoir, unless it is provided with an underdrain system. The slab design and underlayment should be in accordance with ASTM E1643 and E1745.

An optional 1-inch blotter sand or pea gravel layer placed above the plastic membrane, is sometimes used to aid in curing of the concrete. Although historically common, this blotter layer is not currently included in slabs designed according to the 2019 Green Building Code. When omitted, special wet curing procedures will be necessary. If installed, the blotter layer can become a reservoir for excessive moisture if inclement weather occurs prior to pouring the slab, excessive water collects in it from the concrete pour, or an external source of water enters above or bypasses the membrane.

Our experience has shown that vapor transmission through concrete is controlled through proper concrete mix design. As such, proper control of moisture vapor transmission should be considered in the design of the slab as provided by the project architect, structural or civil engineer. It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

Slab Thickness and Reinforcement

Geotechnical reports have historically provided minimums for slab thickness and reinforcement for general crack control. The concrete mix design and construction practices can additionally have a large impact on concrete crack control. All concrete should be anticipated to crack. As such, these minimums should not be considered to be standalone items to address crack control, but are suggested to be considered in the slab design methodology.

In order to help control the growth of cracks in interior concrete from becoming significant, we suggest the following minimums. Interior concrete slabs-on-grade not subject to heavy loads,



should be a minimum of 4-inches thick and reinforced. A minimum of No. 3 deformed reinforcing bars placed at 24 inches on center both ways, at the center of the structural section is suggested. Joint spacing should be provided by the structural engineer. Troweled joints recovered with paste during finishing or "wet sawn" joints should be considered every 10 feet on center. Expansion joint felt should be provided to separate floating slabs from foundations and at least at every third joint. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Vertical Deflections

Soil-supported slab-on-grade floors can deflect downward when vertical loads are applied, due to elastic compression of the subgrade. For preliminary design of concrete floors, a modulus of subgrade reaction of k = 150 psi per inch would be applicable for engineered fills.

Exterior Flatwork

Exterior concrete flatwork is recommended to have a 4-inch-thick rock cushion. This could consist of vibroplate compacted crushed rock or compacted ¾-inch aggregate baserock. If exterior flatwork concrete is against the floor slab edge without a moisture separator it may transfer moisture to the floor slab. Expansion joint felt should be provided to separate exterior flatwork from foundations and at least at every third joint. Contraction / groove joints should be provided to a depth of at least 1/4 of the slab thickness and at a spacing of less than 30 times the slab thickness for unreinforced flatwork, dividing the slab into nearly square sections. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Retaining Walls

Our design recommendations and comments regarding retaining walls for the project site are discussed below. Retaining wall foundations should be designed in accordance with the Shallow Conventional Foundations section above.

Retaining Wall Lateral Pressures

Based on our observations and testing, the retaining wall should be designed to resist lateral pressure exerted from a soil media having an equivalent fluid weight provided in the table below. The values presented below are not factored and are for conditions when firm native soil or engineered fill is used within the zone behind the wall defined as twice the height of the retaining wall. Additionally, the values do not account for the friction of the backfill on the retaining wall which may or may not be present depending on the wall materials and construction.

The lateral pressures presented in the table below include recommendations for earthquake loading which is required for structures to be designed in Seismic Design Categories D, E, or F per Section 1803.5.12.1 of the 2019 California Building Code. The lateral pressures presented have been calculated using the Mononobe-Okabe Method derived from Wood (1973) and modified by Whitman et al. (1991). The values are intended to be used as the multiplier for uniformly distributed loads and the parameter "H" is the total height of the wall including the footing but excluding any key, if used.

Table 7: Retaining Wall Pressures

Wall Type	Wall Slope Configuration	Equivalent Fluid Weight (pcf)	Lateral Pressure Coefficient	Earthquake Loading (plf)		
Free	Flat	33	0.27	3H ²	Applied 0 GH above	
Cantilever	2H:1V	46	0.37	14H ²	Applied 0.6H above the base of the wall	
Restrained*	Flat	52	0.41	14П-	l the base of the wall	

Restrained conditions shall be defined as walls which are structurally connected to prevent flexible yielding, or rigid wall configurations (i.e., walls with numerous turning points) which prevent the yielding necessary to reduce the driving pressures from an at-rest state to an active state.

Generalized Design Values

Some software and design methods do not use the equivalent fluid weight method presented above; instead, they use design soil properties for a given soil condition such as the internal friction angle, cohesion, and bulk unit weight. Generally, this occurs for keyed or interlocking non-mortared walls such as segmental block (Basalite, Keystone, Allan Block, etc.) or rockery walls. When this occurs, the following soil parameters would be applicable for design with the onsite native materials in a firm condition or for engineered fills. The seismic coefficient is considered to be ½ of the adjusted peak ground acceleration for the site conditions is given in Section 4.0 of this report. Some software allows for the extension of the Mononobe-Okabe Method beyond the conventional limitations and, if the method is applied, could calculate seismic values significantly higher than those provided by the multiplier method provided above.

Table 8: Generalized Design Parameters

Internal Angle of Friction	Cohesion	Bulk Unit Weight	Seismic Coefficient, Kh
36°	0 psf	125 pcf	0.111g

Wall Drainage

The criteria presented above is based on fully drained conditions as detailed in the attached Figure C-3, Appendix C. For these conditions, we recommend that a blanket of filter material be placed behind all proposed walls. Permeable materials are specified in Section 68 of the California Department of Transportation Standard Specifications, current edition. The filter material should conform to Class 1, Type B permeable material in combination with a filter fabric to separate the open graded gravel/rock from the surrounding soils. Generally, a clean ¾ inch crushed rock should be acceptable. Consistent with Caltrans Standards, when Class 2 permeable materials are used, the filter fabric may be omitted unless otherwise designed.

The blanket of filter material should be a minimum of 12-inches thick and should extend from the bottom of the wall to within 12 inches of the ground surface. The top 12 inches of wall backfill should consist of a compacted soil cap. A filter fabric having specifications equal to or greater than those for Mirafi 140N should be placed between the gravel filter material and the surrounding soils to reduce the potential for infiltration of soil into the gravel. A 4-inch diameter drain pipe should be installed near the bottom of the filter blanket with perforations facing down. The drainpipe should be underlain by at least 4 inches of filter-type material. An adequate gradient should be provided along the top of the foundation to discharge water that collects behind the retaining wall to a controlled discharge system.

The configuration of a long retaining wall generally does not allow for a positive drainage gradient within the perforated drain pipe behind the wall since the wall footing is generally flat with no gradient for drainage. Where this condition is present, to maintain a positive drainage behind the walls, we recommend that the wall drains be provided with a discharge to an appropriate non-erosive outlet a maximum of 50 feet on center. **In addition, if the wall drain outlets are**



temporarily stubbed out in front of the walls for future connection during construction, it is imperative that the outlets be routed into the tight pipe area drainage system and not buried and rendered ineffective.

Asphalt Concrete Pavement Design

We understand that asphalt pavements will be used for the associated roadways. The following comments and recommendations are given for pavement design and construction purposes. All pavement construction and materials used should conform to applicable sections of the latest edition of the California Department of Transportation Standard Specifications.

Subgrade Compaction

After installation of any underground facilities, the upper 8 inches of subgrade soils under pavements sections should be compacted to a minimum relative compaction of 95 percent based on the ASTM D1557 test method at a moisture content near or above optimum. Aggregate bases should also be compacted to a minimum relative compaction of 95 percent based on the aforementioned test method.

Subgrade Stability

All subgrades and aggregate base should be proof-rolled with a full water truck or equivalent immediately before paving, in order to evaluate their condition. If unstable subgrade conditions are observed, these areas should be overexcavated down to firm materials and the resulting excavation backfilled with suitable materials for compaction (i.e., drier native soils or aggregate base). Areas displaying significant instability may require geotextile stabilization fabric within the overexcavated area, followed by placement of aggregate base. Final determination of any required overexcavation depth and stabilization fabric should be based on the conditions observed during subgrade preparation.

Design Criteria

Critical features that govern the durability of a pavement section include the stability of the subgrade; the presence or absence of moisture, free water, and organics; the fines content of the subgrade soils; the traffic volume; and the frequency of use by heavy vehicles. Soil conditions can be defined by a soil resistance value, or "R-Value," and traffic conditions can be defined by a Traffic Index (TI).

Design Values

The following table provides recommended pavement sections based on R-Value test (CTM 301) performed on bulk samples representative of the materials expected to be exposed at subgrade, as well as our experience with similar materials in the area. An R-value of 67 was determined for the soil tested. Due to the variability of soils and the potential redistribution of material typically encountered during grading, we used an R-Value of 40 in our design.

Design values provided are based upon properly drained subgrade conditions. Although the R-Value design to some degree accounts for wet soil conditions, proper surface and landscape drainage design is integral in performance of adjacent street sections with respect to stability and degradation of the asphalt. If clay soils are encountered and cannot be sufficiently blended with non-expansive soils, we should review pavement subgrades to determine the appropriateness of the provided sections, and provide additional pavement design recommendations as field conditions dictate. Even minor clay constituents will greatly reduce the design R-Value.

The recommended design thicknesses presented in the following table were calculated in accordance with the methods presented in the Sixth Edition of the California Department of

Transportation Highway Design Manual. A varying range of traffic indices are provided for use by the project Civil Engineer for roadway design.

Table 9: Asphalt Pavement Section Recommendations

Design	Alternative Pavement Sections (Inches)		
Traffic Indices	Asphalt Concrete *	Aggregate Base **	
4.5	3.0	4.0	
5.0	3.0	4.0	
5.5	3.0 3.5	5.0 4.0	
6.0	3.0 3.5	6.5 5.5	
6.5	3.5 4.0	7.0 6.0	
7.0	4.0 4.5	7.0 6.0	

Asphalt Concrete: must meet specifications for Caltrans Hot Mix Asphalt Concrete

Due to the redistribution of materials that occurs during mass grading operations, we should review pavement subgrades to determine the appropriateness of the provided sections.

Portland Cement Concrete Pavement Design

We understand that Portland cement concrete pavements may be considered for various aspects of exterior paving for the site. The American Concrete Institute (ACI) Concrete Pavement Design method (ACI 330R-08) was used for design of the exterior concrete (rigid) pavements at the site. The pavement thicknesses were evaluated based on the soil design parameters provided in the following table.

Table 10: Soil Parameters

Subgrade Soil Description	k, Modulus of Subgrade Reaction*	Base Course
Silty SAND	200 pci	6 inches

Based on an R-Value of 40 as recommended above and correlated to a k-Value recommended by ACI 330R.

Based on the subgrade soil parameters shown in the above table, the recommended concrete thicknesses for various traffic descriptions are presented in the table below. The recommended thicknesses provided below assume the use of plain (non-reinforced) concrete pavements.

We recommend that the rigid pavement be placed on at least 6 inches of aggregate base compacted to at least 95 percent of the maximum dry density per the ASTM D 1557 test method. From a geotechnical perspective, contraction joints should be placed in accordance with the American Concrete Institute (ACI) recommendations which include providing a joint spacing about 30 times the slab thickness up to a maximum of 10 feet. The joint patterns should also divide the slab into nearly square panels. If increased joint spacing is desired, reinforcing steel should be installed within the pavement in accordance with ACI recommendations. Final determination of steel reinforcement configurations (if used within the pavements) remains the purview of the Project Structural Engineer.

^{**} Aggregate Base: must meet specifications for Caltrans Class II Aggregate Base (R-Value = minimum 78)

6.5

6.5

Category	ADTT*	Pavement Traffic Description	Thickness (inches)		
Category		ravement trainc description	3000 psi**	4000 psi**	
Α	1	Car parking areas and access lanes	4.0	4.0	
Α	10	Autos, pickups, and panel trucks only	5.0	4.5	
В	25	Shopping center entrance and service lanes Bus parking areas and interior lanes	5.5	5.0	
В	300	Single-unit truck parking areas and interior lanes	6.0	5.5	
С	C 100 C 300 Roadway Entrances and Exterior Lanes		6.5	6.0	
С			6.5	6.0	

Table 11: Concrete Pavement Section Recommendations

700

Drainage

In order to maintain the engineering strength characteristics of the soil presented for use in this report, maintenance of the site will need to be performed. This maintenance generally includes, but is not limited to, proper drainage and control of surface and subsurface water which could affect structural support and fill integrity. A difficulty exists in determining which areas are prone to the negative impacts resulting from high moisture conditions due to the diverse nature of potential sources of water; some of which are outlined in the paragraph below. We suggest that measures be installed to minimize exposure to the adverse effects of moisture, but this will not guarantee that excessive moisture conditions will not affect the structure.

Some of the diverse sources of moisture could include water from landscape irrigation, annual rainfall, offsite construction activities, runoff from impermeable surfaces, collected and channeled water, and water perched in the subsurface soils. Some of these sources can be controlled through drainage features installed either by the owner or contractor. Others may not become evident until they, or the effects of the presence of excessive moisture, are visually observed on the property.

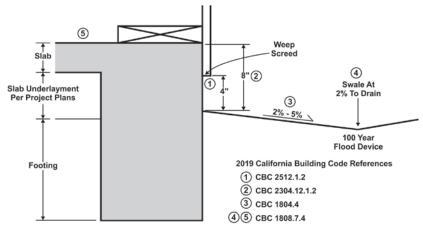
Some measures that can be employed to minimize the buildup of moisture include, but are not limited to proper backfill materials and compaction of utility trenches within the footprint of the proposed structures; grout plugs at foundation penetrations; collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); installation of subdrain/cut-off drain provisions; utilization of low flow irrigation systems; education to the proposed owners of proper design and maintenance of landscaping and drainage facilities that they or their landscaper installs.

Average Daily Truck Traffic

^{** 28-}day concrete compressive strength

Drainage Adjacent to Buildings

All grades should provide rapid removal of surface water runoff; ponding water should not be allowed on building pads or adjacent to foundations or other structural improvements (during and following construction). All soils placed against foundations during finish grading should be compacted to minimize water infiltration. Finish and landscape grading should include positive drainage away from all foundations. Section 1808.7.4 of the 2019 California Building Code (CBC) states that for graded soil sites, the top of any exterior foundation shall extend above the elevation of the street gutter at the point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent. If overland flow is not achieved adjacent to buildings, the drainage device should be designed to accept flows from a 100-year event. Grades directly adjacent to foundations should be no closer than 8 inches from the top of the slab (CBC 2304.12.1.2), and weep screeds are to be placed a minimum of 4 inches clear of soil grades and 2 inches clear of concrete or other hard surfacing (CBC 2512.1.2). From this point, surface grades should slope a minimum of 2 percent away from all foundations for at least 5 feet but preferably 10 feet, and then 2 percent along a drainage swale to the outlet (CBC 1804.4). Downspouts should be tight piped via an area drain network and discharged to an appropriate non-erosive outlet away from all foundations.



Typical 2019 California Building Code Drainage Requirements

The above referenced elements pertaining to drainage of the proposed structures is provided as general acknowledgement of the California Building Code requirements, restated and graphically illustrated for ease of understanding. Surface drainage design is the purview of the Project Architect/Civil Engineer. Review of drainage design and implementation adjacent to the building envelopes is recommended as performance of these improvements is crucial to the performance of the foundation and construction of rigid improvements.

Subdrainage

Reduction of potential moisture related issues could be addressed by the construction of subdrains in addition to the drainage provisions provided in the 2019 CBC. Typical subdrain construction would include a 3 feet deep trench (or depth required to intercept the bottom of utility trenches) constructed as detailed on Figure C-4, Appendix C. The water collected in the subdrain pipe would be directed to an appropriate non-erosive outlet. We recommend that a representative from our firm be present during the subdrain installation procedures to document that the drain is installed in accordance with the observed field conditions, as well as to provide additional consultation as the conditions dictate.



As noted in the previous discussions, the moisture conditions may not manifest until after the site is developed. As such, any recommendations for the subdrain orientation and location to mitigate the moisture conditions can be provided on an as requested basis as the conditions arise.

Post Construction

All drainage related issues may not become known until after construction and landscaping are complete. Therefore, some mitigation measures may be necessary following site development. Landscape watering is typically the largest source of water infiltration into the subgrade. Given the soil conditions on site, excessive or even normal landscape watering could contribute to moisture related problems and/or cause distress to foundations and slabs, pavements, and underground utilities, as well as creating a nuisance where seepage occurs.

8.0 DESIGN REVIEW AND CONSTRUCTION MONITORING

Geotechnical engineering can be affected by natural variability of soils and, as with many projects, the contents of this report could be used and interpreted by many design professionals for the application and development of their plans. For these reasons, we recommend that our firm provide support through plan reviews and construction monitoring to aid in the production of a successful project.

Plan Review

The design plans and specifications should be reviewed and accepted by Youngdahl Consulting Group, Inc. prior to contract bidding. A review should be performed to determine whether the recommendations contained within this report are still applicable and/or are properly interpreted and incorporated into the project plans and specifications. Modifications to the recommendations provided in this report or to the design may be necessary at the time of our review based on the proposed plans.

Construction Monitoring

Construction monitoring is a continuation of geotechnical engineering to confirm or enhance the findings and recommendations provided in this report. It is essential that our representative be involved with all grading activities in order for us to provide supplemental recommendations as field conditions dictate. Youngdahl Consulting Group, Inc. should be notified at least two working days before site clearing or grading operations commence, and should observe the stripping of deleterious material, overexcavation of soft soils and existing fills (if present), and provide consultation, observation, and testing services to the grading contractor in the field. At a minimum, Youngdahl Consulting Group, Inc. should be retained to provide services listed in Table 12 below.

The recommendations included in this report have been based in part on assumptions about strata variations that may be tested only during earthwork. Accordingly, these recommendations should not be applied in the field unless Youngdahl Consulting Group, Inc. is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method. Youngdahl Consulting Group, Inc. cannot assume responsibility or liability for the adequacy of its recommendations when they are used in the field without Youngdahl Consulting Group, Inc. being retained to observe construction.

Post Construction Drainage Monitoring

Due to the elusive nature of subsurface water, the alteration of water features for development, and the introduction of new water sources, all drainage related issues may not become known until after construction and landscaping are complete. Youngdahl Consulting Group, Inc. can



provide consultation services upon request that relate to proper design and installation of drainage features during and following site development.

9.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

- This report has been prepared for the exclusive use of the addressee of this report for specific application to this project. The addressee may provide their consultants authorized use of this report. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, expressed or implied.
- 2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.
- Section [A] 107.3.4 of the 2019 California Building Code states that, in regard to the design
 professional in responsible charge, the building official shall be notified in writing by the owner
 if the registered design professional in responsible charge is changed or is unable to continue
 to perform the duties.
 - WARNING: Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Youngdahl Consulting Group, Inc. must review them to assess their impact on this report's applicability. Also note that Youngdahl Consulting Group, Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the express written authorization of Youngdahl Consulting Group, Inc.
- 4. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. Should any variations or undesirable conditions be encountered during the development of the site, Youngdahl Consulting Group, Inc. will provide supplemental recommendations as dictated by the field conditions.



Table 12: Checklist of Recommended Services

	Item Description	Recommended	Not Anticipated
1	Provide foundation design parameters	Included	
2	Review grading plans and specifications	✓	
3	Review foundation plans and specifications	✓	
4	Observe and provide recommendations regarding demolition		✓
5	Observe and provide recommendations regarding site stripping	✓	
6	Observe and provide recommendations on moisture conditioning, removal, and/or recompaction of unsuitable existing soils	√	
7	Observe and provide recommendations on the installation of subdrain facilities	✓	
8	Observe and provide testing services on fill areas and/or imported fill materials	√	
9	Review as-graded plans and provide additional foundation recommendations, if necessary	✓	
10	Observe and provide compaction tests on storm drains, water lines and utility trenches	✓	
11	Observe foundation excavations and provide supplemental recommendations, if necessary, prior to placing concrete	✓	
12	Observe and provide moisture conditioning recommendations for foundation areas and slabon-grade areas prior to placing concrete		✓
13	Provide design parameters for retaining walls	Included	
14	Observe retaining wall drain installation	✓	
15	Provide finish grading and drainage recommendations	Included	
16	Provide geologic observations and recommendations for keyway excavations and cut slopes during grading	√	
17	Excavate and recompact all test pits within structural areas	✓	

APPENDIX A

Field Study

Vicinity Map
Site Plan
Exploratory Test Pit Logs
Soil Classification Chart and Log Explanation



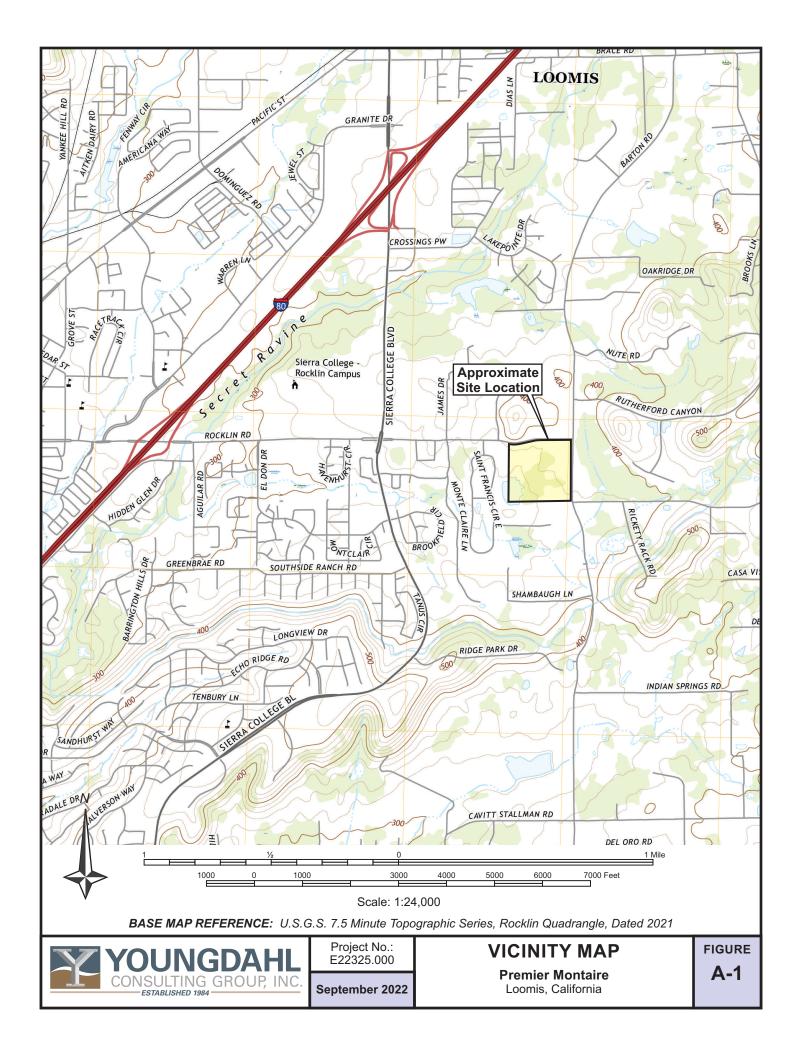
Introduction

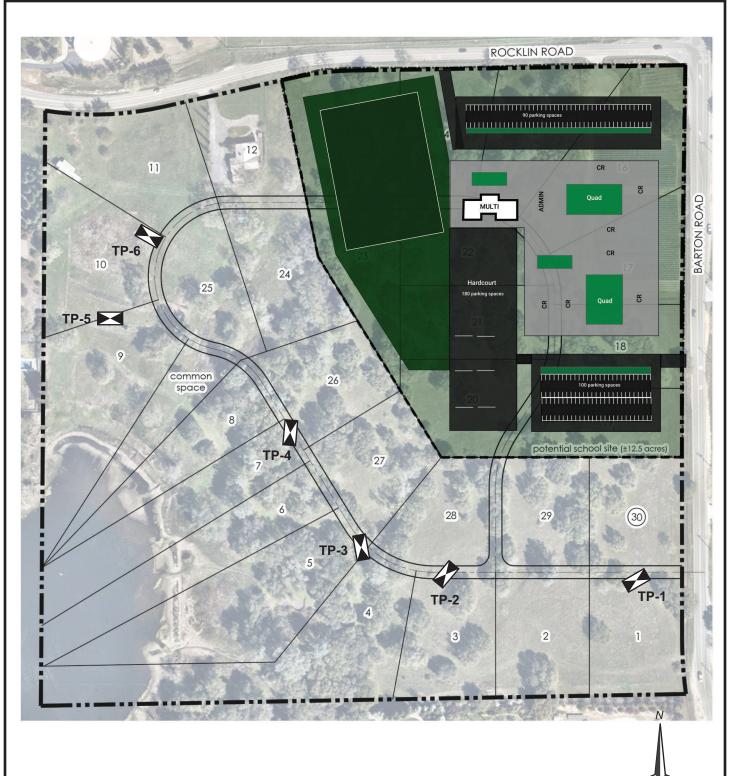
The contents of this appendix shall be integrated with the Geotechnical Engineering Study of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

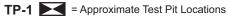
Our field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 9 August 2022, which included the excavation of six test pits under his direction at the approximate locations shown on Figure A-2, this Appendix. Excavation of the test pits was accomplished with a John Deere 410G 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.

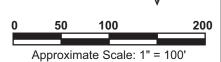
The Exploratory Test Pit Logs describe the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradual, our logs indicate the average contact depth. Our logs also graphically indicate the approximate depth of each soil sample obtained from the test pits.

The soils encountered were logged during excavation and provide the basis for the "Exploratory Test Pit Logs", Figures A-3 through A-8, this Appendix. These logs show a graphic representation of the soil profile and the depths at which samples were collected.









REFERENCE: Site Plan, Loomis Basin Charter, Rainforth Grau Architects, Dated 5/17/2022



Project No.: E22325.000

September 2022

SITE PLAN

Premier Montaire Loomis, California

FIGURE A-2

Logged By: PF Lat / Lon: N 38.785732° / W 121.192454° Pit No. Date: 9 August 2022 TP-1 Equipment: John Deere 410G with 12" Bucket Pit Orientation: 240° Elevation: ~ Depth Geotechnical Description & Unified Soil Classification Sample **Tests & Comments** (Feet) @ 0' - 1' Brown silty SAND (SM) with trace gravel, medium dense **∏** TP-1 TP-1 @ 0-2' to dense, dry @ 0-2' R-Value = 67 @ 1' - 2.5' Yellow brown granitic **BEDROCK**, highly weathered, soft to moderately soft, dry @ 2.5' - 6' Grades moderately weathered, moderately hard @ 6' - 7' Grades hard to very hard Test pit terminated at 7' (practical refusal) No free groundwater encountered No caving noted 18' 16' 24' 26' 10' 14' 20' 28' SM 2' BEDROCK 4 6' 8' 10' 12' 14 16' Scale: 1" = 4 Feet

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.



Project No.: E22325.000

September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California FIGURE

Logged By: PF Lat / Lon: N 38.785772° / W 121.193808° Pit No. Date: 9 August 2022 TP-2 Equipment: John Deere 410G with 12" Bucket Pit Orientation: 220° Elevation: ~ Depth Geotechnical Description & Unified Soil Classification Sample Tests & Comments (Feet) @ 0' - 1' Yellow brown silty SAND (SM), medium dense to dense, TP-2 @ 2-3' Corrosivity Suite dry @ 1' - 2.5' Red yellow granitic **BEDROCK**, highly weathered, **∏** TP-2 @ 2-3' moderately soft to moderately hard, dry to slightly moist @ 3.5' - 5' Grades moderately weathered, moderately hard to hard Test pit terminated at 5' (practical refusal) No free groundwater encountered No caving noted 18' 16' 24' 26' 10' 14' 20' 28' SM 2' **BEDROCK** 4 6' 8' 10' 12' 14 16' Scale: 1" = 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.



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September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California FIGURE

Logged By: PF Date: 9 August 2022		Lat / Lon: N 38.785955° / W 121.194470°			470°	Pit No.		
Equipment: John Deere 410G with 12" Bucket Pit Orientation					Elevation	: ~	TP-3	
Depth (Feet)	Geotechnic	cal Description & Unified Soil (Classification	Sample	-	Tests & Com	ments	
@ 0' - 1'	Red yellow si	Ity SAND (SM) , medium dens	e to dense, dry					
@ 1' - 2.5'		ranitic BEDROCK , highly to moderately hard to very hard, o						
@ 0.75' - 3'		ellow, highly to moderately we ard to very hard, dry	eathered,					
	Test pit terminated at 3' (practical refusal) No free groundwater encountered No caving noted							
2' - 2' - 4' - 6' - 10' - 12' - 14'	4' 6' SN		14' 16'	18' 20	22'	24' 2	6' 28'	
						s	≥ N	
16'-						1	' = 4 Feet	

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.



Project No.: E22325.000

September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California **FIGURE**

Logged By: PF Lat / Lon: N 38.786608° / W 121.194939° Pit No. Date: 9 August 2022 TP-4 Equipment: John Deere 410G with 12" Bucket Pit Orientation: 5° Elevation: ~ Depth Geotechnical Description & Unified Soil Classification Sample **Tests & Comments** (Feet) @ 0' - 1' Dark brown silty SAND (SM), medium dense to dense, dry **∏** TP-4 TP-4 @ 0-1.5' $\phi = 40.8^{\circ}$, c = 25 psf DDmax = 121.1 pcf @ 0-1.5' @ 1' - 4' Brown to red yellow granitic BEDROCK, highly to MCopt = 8.9% moderately weathered, moderately hard to very hard, dry Test pit terminated at 4' (practical refusal) No free groundwater encountered No caving noted 12' 18' 14' 16' 22' 24' 26' 10' 20' 28' SM 2' BEDROCK 4' 6' 8' 10' 12' 14 16' Scale: 1" = 4 Feet

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.



Project No.: E22325.000

September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California FIGURE

Logged By: PF Lat / Lon: N 38.787207° / W 121.196185° Pit No. Date: 9 August 2022 TP-5 Equipment: John Deere 410G with 12" Bucket Pit Orientation: 275° Elevation: ~ Depth Geotechnical Description & Unified Soil Classification Sample **Tests & Comments** (Feet) @ 0' - 2' Olive yellow to pink clayey SAND (SC) with cobbles, **∏** TP-5 TP-5 @ 4-10' EI = 61 (medium) medium dense, dry (FILL) @ 0-2' @ 2' - 11' Pale olive sandy SILT (ML) with clay and trace gravel, **∏** TP-5 @ 4-10' medium stiff, slightly moist (FILL) Grey to brown silty **SAND (SM)** with clay, dense, slightly @ 11' - 13.5' moist (FILL?) @ 13.5' - 14' Black and brown granitic **BEDROCK**, completely to highly weathered, moderately hard, slightly moist Test pit terminated at 14' (max reach) No free groundwater encountered No caving noted 10' 12' 16' 18' 24' 26' 14' 20' 28' SC (FILL) 2' 4 ML (FILL) 6' 8' 10' 12' SM (FILL?) 14 **BEDROCK** 16' Scale: 1" = 4 Feet

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.



Project No.: E22325.000

September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California FIGURE

Logged By: F	PF	Date: 9 August 2022	Lat / Lon: N 38 .	.787641°/	W 121.195	819°	Pit No.
Equipment: J	John Deere 41	0G with 12" Bucket	: 125° Elevation: ~			TP-6	
Depth (Feet)	Geotechnic	cal Description & Unified Soil (Sampl	е	Tests & Comi	ments	
@ 0' - 0.5'	Brown sandy	SILT (ML), medium stiff, dry ((FILL?)				
@ 0.5' - 4.5'	Grey to brown	n silty SAND (SM) , dense, slig	ghtly moist				
@ 4.5' - 5'	Black and bro moderately so	own granitic BEDROCK , highloft	y weathered,				
	Test pit termir No free grour No caving no	ndwater encountered					
0 2'	4' 6'	8' 10' 12'	14' 16'	18' 2	0' 22'	24' 2	6' 28'
21.			ML (FILL?)				
6' +	BEDR	оск					
8' -							
10'							
12'-							
14'-							
16'-						SE —	NW NW
· •						Scale: 1"	= 4 Feet

Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.



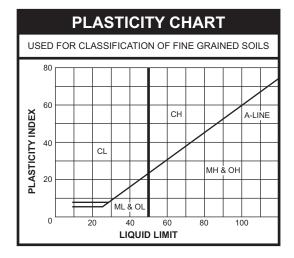
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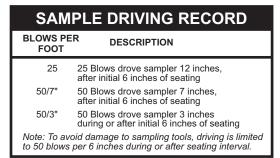
September 2022

EXPLORATORY TEST PIT LOG

Premier Montaire Loomis, California FIGURE

	UNI	FIED SOIL	_ CL	.ASS	IFICATION SYSTEMS
ı	MAJOR	DIVISION	SYM	BOLS	TYPICAL NAMES
	eve	Clean GRAVELS	GW		Well graded GRAVELS , GRAVEL-SAND mixtures
_တ ု	GRAVELS Over 50% > #4 sieve	With Little Or No Fines	GP		Poorly graded GRAVELS , GRAVEL-SAND mixtures
Sieve	GRA er 50%	GRAVELS With	GM		Silty GRAVELS, poorly graded GRAVEL-SAND- SILT mixtures
AINE #200	Ove	Over 12% Fines	GC		Clayey GRAVELS , poorly graded GRAVEL-SAND- CLAY mixtures
COARSE GRAINED SOILS Over 50% > #200 sieve	sieve	Clean SANDS With Little	SW		Well graded SANDS, gravelly SANDS
Over (SANDS Over 50% < #4 si	Or No Fines	SP		Poorly graded SANDS , gravelly SANDS
ŏ		SANDS With	SM		Silty SANDS, poorly graded SAND-SILT mixtures
		Over 12% Fines	SC		Clayey SANDS , poorly graded SAND-CLAY mixtures
			ML		Inorganic SILTS, silty or clayey fine SANDS, or clayey SILTS with plasticity
SOILS) sieve	SILTS & CLAYS Liquid Limit < 50		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
GRAINED 50% < #20			МН		Inorganic SILTS, micaceous or diamacious fine sandy or silty soils, elastic SILTS
FINE Over		LTS & CLAYS quid Limit > 50	СН		Inorganic CLAYS of high plasticity, fat CLAYS
			ОН		Organic CLAYS of medium to high plasticity, organic SILTS
HIG	HLY OR	GANIC CLAYS	PT		PEAT & other highly organic soils





	SOIL GRAIN SIZE									
U.S. STAND	U.S. STANDARD SIEVE 6" 3" ¾" 4 10 40 200									
	POLII DED	COBBLE	GRA	VEL		SAND		CUIT	CL AV	
SOIL	BOULDER	COBBLE	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY	
	IN MILLIMETERS	150	75 1	9 4.	75 2	.0 .4	25 0.0	0.0	002	

KEY	TO PIT & BORING SYMBOLS	KEY TO PIT & BORING SYMBOLS			
	Standard Penetration test	_	Joint		
	2.5" O.D. Modified California Sampler	م	Foliation Water Seepage		
	3" O.D. Modified California Sampler	NFWE FWE	No Free Water Encountered Free Water Encountered		
	Shelby Tube Sampler	REF	Sampling Refusal		
0	2.5" Hand Driven Liner	DD MC	Dry Density (pcf) Moisture Content (%)		
\mathbb{Z}	Bulk Sample	LL Pl	Liquid Limit Plasticity Index		
\subseteq	Water Level At Time Of Drilling	PP UCC	Pocket Penetrometer Unconfined Compression (ASTM D2166)		
=	Water Level After Time Of Drilling	TVS	Pocket Torvane Shear		
₽ ≚	Perched Water	EI Su	Expansion Index (ASTM D4829) Undrained Shear Strength		



Project No.: E22325.000

September 2022

SOIL CLASSIFICATION CHART AND LOG EXPLANATION Premier Montaire Loomis, California FIGURE A-9

APPENDIX B

Laboratory Testing

Direct Shear Test Modified Proctor Test R-Value Test Expansion Index Test Corrosivity Tests

Direct Shear Test of Soils Under Consolidated Drained Conditions, ASTM D3080 6000 6000 **Direct** Shearbox 5000 5000 Results **Friction Angle** 40.8° Failure Stress, psf 4000 4000 Cohesion Failure Stress, 4b00 25 psf 3000 3000 2000 2000 2b00 1000 1000 1b00 0 0 0% 5% 10% 15% 20% 25% 0 2000 4000 6000 Normal Stress, psf **Horizontal Displacement** 4% Test No. 2 3 1 3% Wet Density, pcf 118.7 118.7 118.7 Dry Density, pcf 109.0 109.0 109.0 2% Vertical Displacement Moisture Content, % 8.9 8.9 8.9 1% 2.50 2.50 2.50 Diameter, in 1.00 1.00 1.00 0% Height, in 129.1 128.7 129.6 Wet Density, pcf -1% 1000 109.6 110.2 2b00 Shear Dry Density, pcf 111.5 -2% Moisture Content, %* 16.9 16.3 17.8 2.50 2.50 2.50 Diameter, in -3% 0.99 0.99 0.98 Height, in -4% 1000 2000 4000 Normal Stress, psf 15% 0% 10% 20% 25%

*Based on post shear moisture content

Failure Stress, psf

Failure Strain, %

Rate, in/min

Sample Type: Remolded to 90% RC

Material Description: Dark Brown Silty SAND (Decomposed Granite)

Horizontal Displacement

Source: Native

Notes: Gravel removed from test sample.

Plasticity % Greater than % Less than USCS Class. Liquid Limit Sample No./Depth: TP-4 @ 0-1.5' No. 4 No. 200 Index Date Test Date 8/25/2022 8/9/2022 0 Sampled: Started:



ph 916.933.0633 • fx 916.933.6482 • www.youngdahl.net

Proiect:	Pre	mie	r Mo	ntaire

Project No.:	325.000	Figure		
Reviewed By:	DN	Date:	8/31/2022	B-1

775

1.31

1925

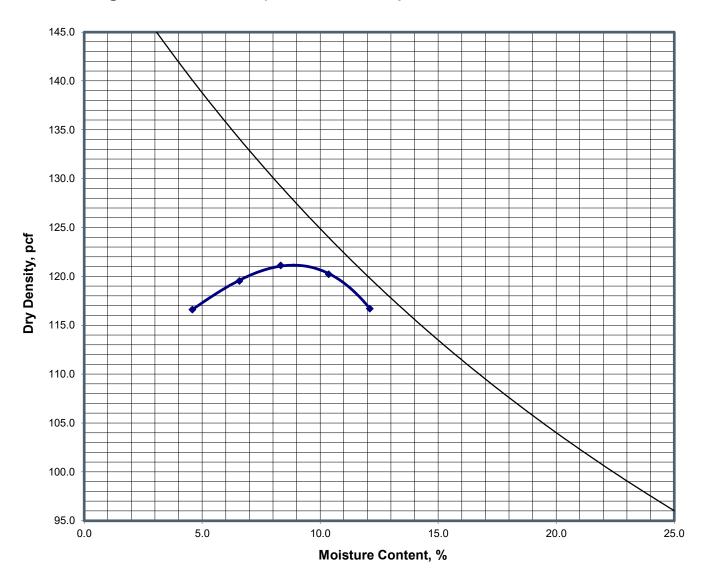
3.66

0.0025

3426

14.11

Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 If-lbf/ft3), ASTM D1557, Method A



Zero Air Voids Curve at 100% Saturation; Specific Gravity Estimated at: 2.50

121.1 Maximum Dry Density, pcf: Optimum Moisture Content, %: 8.9

Dark Brown Silty SAND (Decomposed Granite) Material Description:

Source:

Native

Notes:

Plasticity % Greater than % Less than TP-4 @ 0-1.5' Sample No./Depth: USCS Class. Liquid Limit Index No. 4: No. 200 Date Date Test 8/9/2022 8/23/2022 0 Sampled: Started:

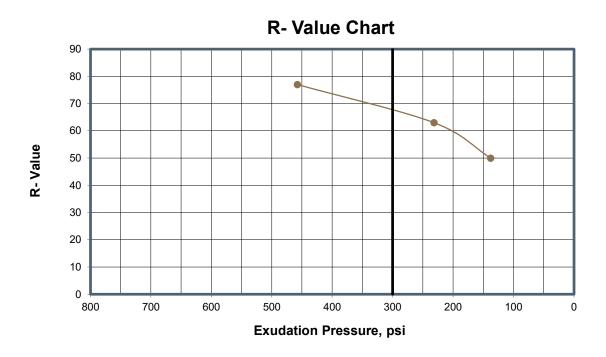
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	CONSULTING GROUP, INC.
	ECTARI ICUED 1004

Premier Montaire Project:

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Resistance "R" Value of Soil and Soil-Aggregate Mixtures, CTM 301



Test Specimen No.:	1	2	3
Moisture Content at Test, %	9.7	10.7	11.7
Dry Density at Test, pcf	126.3	125.2	124.1
Expansion Pressure, psf	39	22	0
Exudation Pressure, psi	458	232	138
Resistance "R" Value	77 63		50
"R" Value at 300 psi Exudation	67		

							_	
Material Description: Brown Silty SAND with trace Gravel (Decomposed Granite)								
Source:								
Notes:								
Sample No./Depth:	TP-1 @ 0-2'		USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200	
Date 8/9/2022 Sampled:	Date Test Started:	8/23/2022				1		

Project:

YOUNGDAHL CONSULTING GROUP, INC.					
ESTABLISHED 1984					
1234 Glenhaven Court, El Dorado Hills, CA 95762 ph 916.933.0633 • fx 916.933.6482 • www.youngdahl.net					

_				
Project No.:		E22325.	000	Figure
Reviewed By:	JLC	Date:	8/31/2022	B-3

Premier Montaire

Expansion Index of Soils, ASTM D4829

Test Results

Expansion Index	61
Dry Density, as molded, pcf	102.7
Moisture Content, as molded, %	12.0
Final Moisture Content, %	23.2
Initial Saturation, as molded, %	50.6

Classification of Potentially Expansive Soil

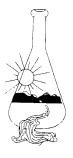
Expansion Index, EI	Potential Expansion
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
Above 130	Very High

Material Description: Pale Olive Sandy SILT with Clay and trace Gravel							
Source:							
Notes:							
Sample No./Depth:	TP-5 @ 4-10'		USCS Class.	Liquid Limit	Plasticity Index	% Greater than No. 4	% Less than No. 200
Date Sampled: 8/9/2022	Date Test Started:	8/16/2022				1	
			1				

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ESTABLISHED 1984						
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Project:	Premier	nontan	е	
Project No.:	E	=22325	5.000	Figure
Reviewed By:	DN	Date:	8/25/2022	B-4

Sunland Analytical



11419 Sunrise Gold Circle, #10 Rancho Cordova, CA 95742 (916) 852-8557

> Date Reported 08/17/2022 Date Submitted 08/12/2022

To: Jeffry Cannon Youngdahl Consulting Group 1234 Glenhaven Ct. El Dorado Hills, CA 95630

From: Gene Oliphant, Ph.D. \ Randy Horney

General Manager \ Lab Manager

The reported analysis was requested for the following location: Location: E22325.000 BARTON RD Site ID: TP-2@2-3. Thank you for your business.

* For future reference to this analysis please use SUN # 87960-182898.

EVALUATION FOR SOIL CORROSION

Soil pH

Minimum Resistivity 14.74 ohm-cm (x1000)

Chloride

3.0 ppm

00.00030 %

Sulfate

1.5 ppm 00.00015 %

METHODS

pH and Min.Resistivity CA DOT Test #643 Sulfate CA DOT Test #417, Chloride CA DOT Test #422m

APPENDIX C

Details

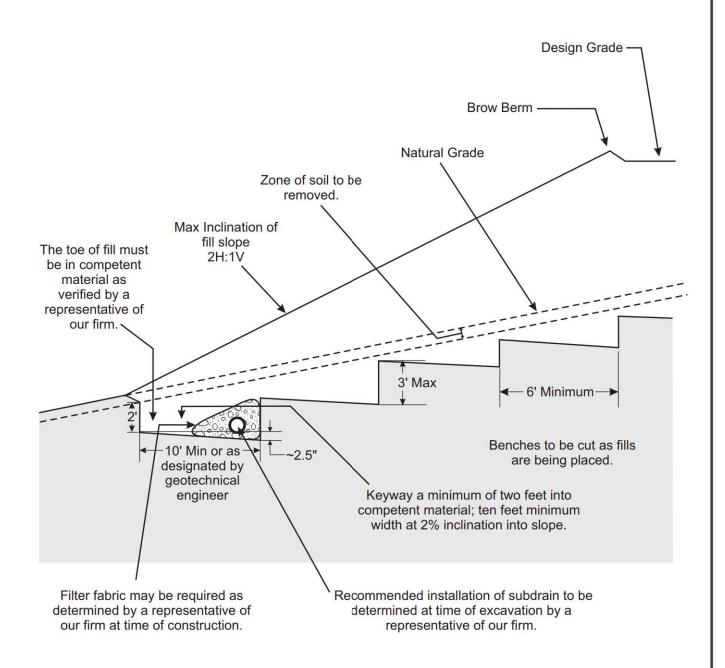
Keyway and Bench with Drain Plug and Drain Site Wall Drainage Subdrain

PLACEMENT OF FILL ON NATURAL SLOPE

(Typical)

All keyways should be observed and approved prior to placement of fill.

A keyway is required by CBC for fills on natural slopes of 5H:1V or steeper.





Project No.: E22325.000

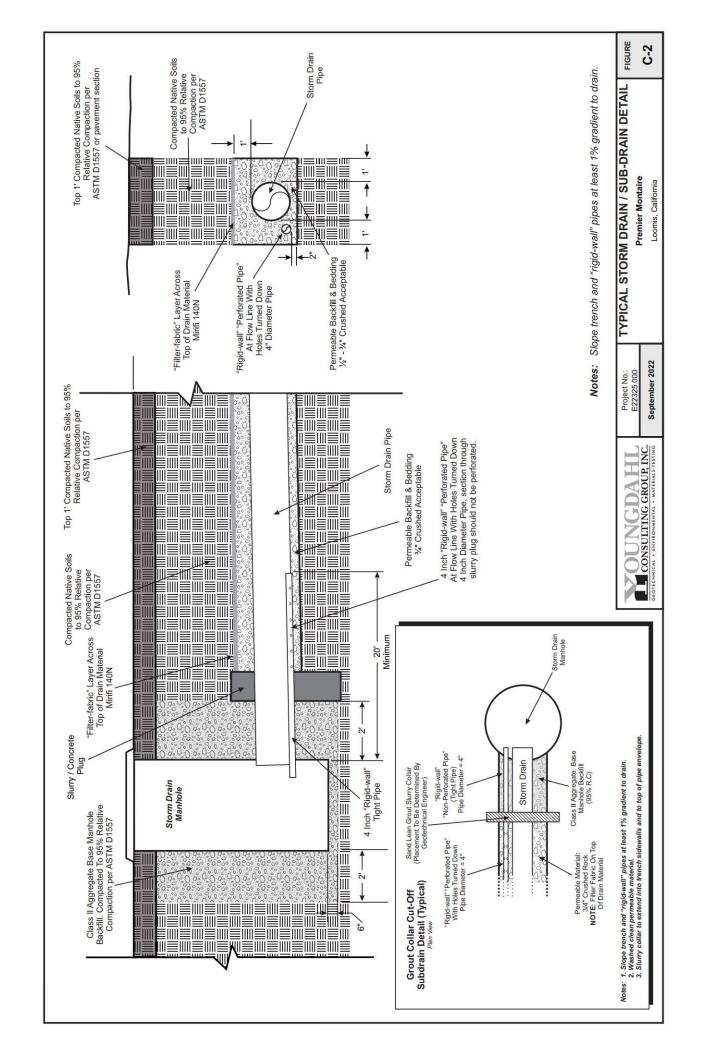
September 2022

KEYWAY & BENCH WITH DRAIN
Premier Montaire

Loomis, California

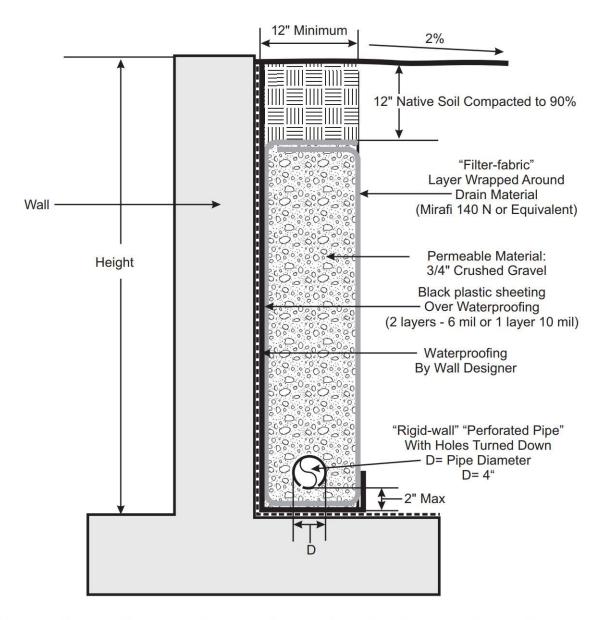
FIGURE

C-1



Retaining Wall With "Perforated Pipe Sub-Drain"

(Typical Cross Section)



Notes:

- 1. Slope footing and "rigid-wall" pipes along flow line parallel to wall at least 1% gradient to drain to an appropriate outfall area away from residence.
- 2. Use "sweeps" for directional changes in pipe flow (do not use 90°elbows).
- 3. Provide periodic "clean-outs".
- 4. Washed clean permeable material.

Not To Scale



Project No.: E22325.000

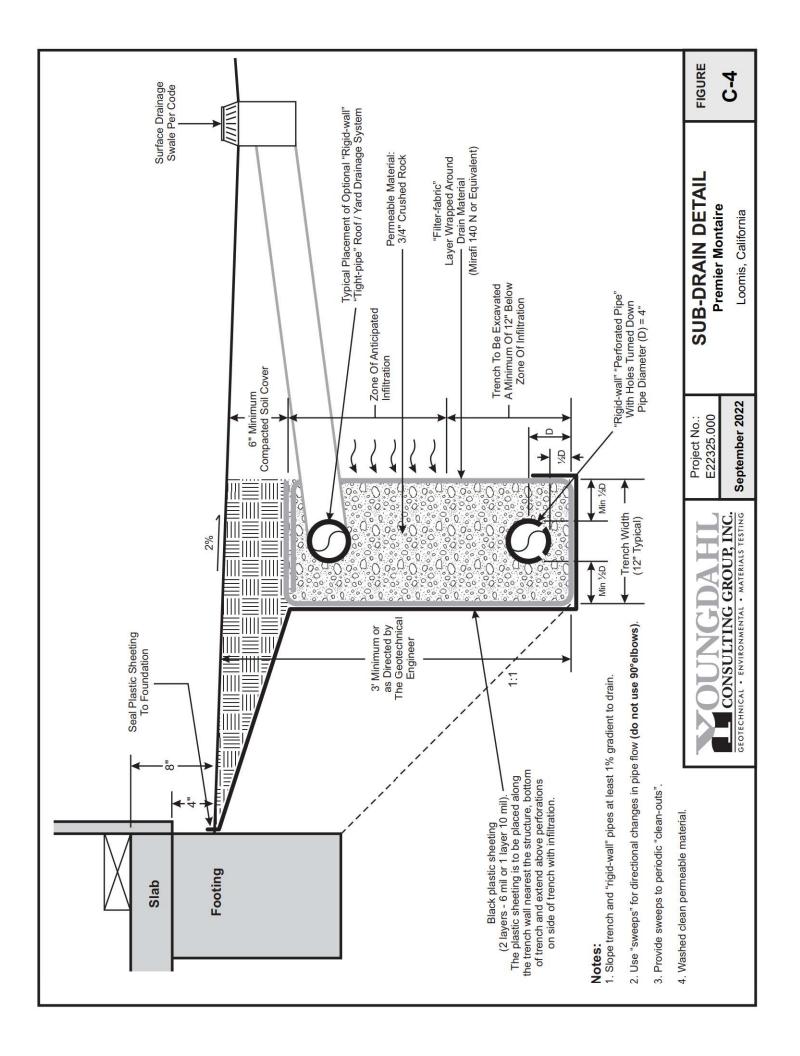
September 2022

RETAINING WALL DRAIN DETAIL Premier Montaire

Loomis, California

FIGURE

C-3



APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PHASE I ENVIRONMENTAL SITE ASSESSMENT THE RESERVE PLACER COUNTY APN 045-161-033 LOOMIS, CALIFORNIA

Prepared For

Premier 40, LLC 8483 Douglas Plaza Drive Granite Bay, California 95746

Prepared By

Youngdahl Consulting Group, Inc. 1234 Glenhaven Court El Dorado Hills, California 95762

> Project No. E22325.002 September 2025





Premier 40, LLC 8483 Douglas Plaza Drive Granite Bay, California 95746 Project No. E22325.002 5 September 2025

Attention: Mr. Stefan Horstschraer

Subject: THE RESERVE

5780 Rocklin Road, Loomis, California Phase I Environmental Site Assessment

As requested, Youngdahl Consulting Group, Inc. (Youngdahl) has performed a Phase I Environmental Site Assessment (Phase I ESA) for The Reserve located at 5780 Rocklin Road in Loomis, California (Subject Property). **The following recognized environmental conditions were identified in connection with the Subject Property**:

- On-site concerns were noted from the potential presence of lead from lead-based paint that may have been used in the construction and/or maintenance of the western structures and the Quonset hut on the eastern portion of the Subject Property.
- On-site concerns were noted from the potential presence of organochlorine pesticides that may have been applied as termiticides in surface soils in the vicinity of the western structures and the eastern residence.
- On-site concerns were noted from the potential presence of organochlorine pesticides, lead, and arsenic that may have been applied to the orchard on the northern portion of the Subject Property.
- There is a potential that aerially deposited lead from the historical use of leaded gasoline has impacted the soil around Rocklin Road on the northern portion of the Subject Property.
- On-site concerns were noted from the presence of a pole-mounted transformer on the northern property boundary and the potential that older transformers contained polychlorinated biphenyls (PCBs).
- On-site concerns were noted from the presence of a soil stockpile observed on the western portion of the Subject Property. The current owner of the parcel indicated that the soil was placed on the Subject Property in 2007 and originated from a site to the north. The lack of historical information regarding the origin of the soil piles is a recognized environmental condition.

Furthermore, no historical RECs (HRECs), controlled RECs (CRECs), or de minimis conditions (DMCs) were identified in connection with the property.

This Phase I Environmental Site Assessment has been completed in accordance to the ASTM Practice E1527-21. Youngdahl Consulting Group, Inc. declares that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10(b). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.







Regards,

Youngdahl Consulting Group, Inc.

Reviewed by:

NO. 2133 EXPIRATION DATE

9-30-26

Allie Denny Staff Geologist David C. Sederquist, C.E.G, C.H.G.

Senior Engineering Geologist/Hydrogeologist

Distribution: 1 PDF: Client

Celebrating 40 Years of Service

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Privileged & Confidential

PHASE I ENVIRONMENTAL SITE ASSESSMENT THE RESERVE PLACER COUNTY APN 045-161-033 LOOMIS, CALIFORNIA 95650

EXECUTIVE SUMMARY

Subject Property Description

The property description referred to herein is based on a Placer County Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1 and is referred to in this Phase I ESA as the Subject Property. This Phase I Environmental Site Assessment (ESA) has been prepared for The Reserve located at 5780 Rocklin Road in Loomis, Placer County, California (herein referred to as Subject Property). The Subject Property consists of 26.29 acres of vacant land, and is assigned Placer County Assessor's Parcel Number (APN) 045-161-033.

The review of historical records indicates that the Subject Property was wooded land with Rocklin Road and an orchard existing on the northern portion from at least 1938. By 1957, a pond was located on the southwestern portion of the Subject Property and by 1966 a small structure was located on the western portion. The orchard was removed and an additional structure was built near the northwest corner by 1984. By 1993, a residence near the northeastern corner and hobby-sized orchards were added and by 2009, a soil stockpile was placed on the western portion of the Subject Property and the hobby-sized orchards and the small structure were removed. The structure on the northwestern corner was removed by 2025.

Adjacent Properties

The northern adjoining property was an orchard from at least 1938. The orchard was removed and a water storage tank was constructed by 1984. The properties to the east of the Subject Property were wooded land or an orchard from at least 1938 until at least 1975 when the orchard was removed. Barton Road has been present since at least 1938. A structure and a small patch of row crops were constructed by 2009 and additional structures were constructed across Barton Road by 2018. The properties to the south and west of the Subject Property have been wooded land from at least 1938. By 1993, construction for a subdivision had begun.

<u>Purpose</u>

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-21 standards are consistent with the requirements of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "(1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment."



Historical recognized environmental condition (HREC) is a term used to state that the property has had a previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Subject Property to any controls. The term 'controlled REC' (CREC) describes a REC that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls. De minimis conditions (DMCs) are those situations that do not present a threat to human health or the environment and generally would not be subject to enforcement actions if brought to the attention of the regulating authority.

Summary and Opinion

Two historical structures were identified in aerial photography on the western portion of the Subject Property, and an existing residence and a Quonset hut were observed on the eastern portion. The northern portion of the Subject Property was observed to contain an orchard from at least 1938 until at least 1975. In addition, Rocklin Road has been on the Subject Property since at least 1938. A soil stockpile was observed on the western portion of the Subject Property and there is a lack of information regarding the source of the stockpiled soil.

Based on the above, the following RECs were identified in connection with the Subject Property:

- On-site concerns were noted from the potential presence of lead from lead-based paint that may have been used in the construction and/or maintenance of the western structures and the Quonset hut on the eastern portion of the Subject Property.
- On-site concerns were noted from the potential presence of organochlorine pesticides that may have been applied as termiticides in surface soils in the vicinity of the western structures and the eastern residence.
- On-site concerns were noted from the potential presence of organochlorine pesticides, lead, and arsenic that may have been applied to the orchard on the northern portion of the Subject Property.
- There is a potential that aerially deposited lead from the historical use of leaded gasoline has impacted the soil around Rocklin Road on the northern portion of the Subject Property.
- On-site concerns were noted from the presence of a pole-mounted transformer on the northern property boundary and the potential that older transformers contained polychlorinated biphenyls (PCBs).
- On-site concerns were noted from the presence of a soil stockpile observed on the western portion of the Subject Property. The current owner of the parcel indicated that the soil was placed on the Subject Property in 2007 and originated from a site to the north. The lack of historical information regarding the origin of the soil piles is a recognized environmental condition.

No CRECs, HRECs, or DMCs were identified in connection with the Subject Property.

Recommendations

It is the opinion of Youngdahl Consulting Group, Inc. that soil sampling should be performed around the existing and historical structures, in the historical orchard, around Rocklin Road, from beneath the pole-mounted transformer on the northern portion of the Subject Property, and from the soil stockpile.



Site Assessor

A site reconnaissance visit was conducted on 11 August 2025 by Ms. Allie Denny, Youngdahl Consulting Group, Inc., (916) 933-0633, <u>allie.denny@youngdahl.net</u>.

Significant Data Gaps

According to § 3.3.19 of ASTM Standard E1527-21, a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather such information. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. A significant data gap (ASTM E1527-21 § 3.3.78) is a data gap that affects the ability to identify RECs. It is our opinion that no data gaps or significant data gaps were discovered during preparation of this report.

1.0 INTRODUCTION

1.1 Subject Property

The Reserve, or the property that is the subject of this environmental site assessment and referred to as Subject Property, is located at 5780 Rocklin Road in Loomis, Placer County, California. The Subject Property consists of 26.29 acres of land and has been assigned Placer County Assessor's Parcel Number (APN) 045-161-033.

1.2 Purpose

The User, Premier 40, LLC, requested the completion of the Phase I Environmental Site Assessment (Phase I ESA) per ASTM E1527-21. This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-21 standards are consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10). The ASTM practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

Potential findings per the ASTM Phase I Standards can include recognized environmental conditions (RECs), controlled RECs (CRECs), historical RECs (HRECs), and de minimis conditions (DMCs). A REC is defined in the ASTM Phase I Standards to mean "(1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with laws.

HRECs are a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or authorities meeting unrestricted use criteria established by a regulatory authority or authorities without subjecting the property to any required controls (for example, activity and use limitations or other property use limitations).

CRECs are a REC affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, activity and use limitations or other property use limitations).



A de minimis condition (DMC) is a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor is a controlled recognized environmental condition.

Controlled substances (i.e., illegal drugs) are not included within the scope of this standard. Petroleum products are included within the scope of this practice because they are of concern with respect to many parcels of commercial real estate and current custom and usage is to include an inquiry into the presence of petroleum products when preparing a Phase I ESA for commercial real estate. This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)'s landowner liability protection. Users are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance. The scope of this practice includes research and reporting requirements that support the User's ability to qualify for landowner liability protection. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report.

1.3 Detailed Scope of Services

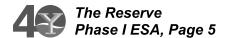
This scope of services is site specific in that it relates to assessment of environmental conditions on a specific parcel of real estate. The Phase I ESA will be performed by an environmental professional. An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). The scope of services for this Phase I ESA is as follows:

<u>Government Records Review</u>: Standard environmental record sources, including Federal, Tribal, and State lists as well as local sources of environmental records were reviewed. We authorized Environmental Data Resources (EDR) to conduct a search of specified government databases and produce a map-based radius search report which would identify sites within the approximate minimum distances pursuant to the ASTM E1527-21 Standard.

Review of Historical Sources: Historical records that may have been reviewed include, but are not limited to, aerial photographs, fire insurance (Sanborn®) maps, building department records, chain-of-title documents, city directory abstracts, land use records, and USGS Topographic Maps. The AAI rule requires that historical documents be reviewed as far back in time as the property contained structures or the property was used for agricultural, residential, commercial, industrial, or governmental purposes. Under the AAI rule, historical sources of information must be reviewed as far back as 1940. The AAI rule does not specify a research interval for reviewing historical records.

<u>Site Reconnaissance</u>: A site reconnaissance visit was conducted on 11 August 2025 by Ms. Allie Denny, allie.denny@youngdahl.net.

<u>Interviews</u>: Interviews with past and present owners, operators, or occupants were conducted to obtain information indicating RECs in connection with the Subject Property. The User was asked to identify a person with good knowledge of the property (the key site manager). A



Phase I ESA Questionnaire completed by the Owner's representative to facilitate the collection of information is provided in Appendix A. The AAI rule requires interviews be conducted with the current owner(s) and occupant(s) of the Subject Property. The AAI rule also requires that additional interviews be conducted with current and past facility managers, past owners, operators or occupants of the property, and past employees, as necessary to meet the objectives of the AAI rule. The AAI rule allows the environmental professional to determine whether such interviews are necessary.

Interviews with state and/or local government officials to obtain information indicating RECs in connection with the Subject Property were performed.

<u>Identify Significant Data Gaps</u>: If a data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, the environmental professional will give the reasons for their exclusion. If data failure represents a significant data gap, the report shall comment on the impact of the data gap on the ability of the environmental professional to identify recognized environmental conditions. If the data gaps are found, the environmental professional can and does not warrant nor guarantee that no significant events, releases, or conditions arose during the periods of such data gaps.

Evaluation and Report Preparation: The findings, opinions, and conclusions in the Phase I ESA report are supported by documentation. The report: (1) describes all services performed; (2) has a findings section which summarizes known or suspect environmental conditions associated with the property, and which may include recognized environmental conditions, historical recognized environmental conditions, and de minimis conditions; (3) includes Youngdahl Consulting Group Inc.'s opinion(s) of the impact on the property of the known or suspect environmental conditions identified in the findings section as well as the logic and reasoning used in evaluating information collected during the course of the investigation; and (4) includes a conclusions and recommendations section that summarizes the recognized environmental conditions connected with the property and presents recommendations to address those conditions. The report will include an analysis of the relationship of the purchase price of the Subject Property to the fair market value of the property, if it were not contaminated.

Report Shelf Life: Under the AAI rule, a prospective property owner may use a Phase I ESA Report without having to update any information collected as part of the inquiry: (1) if the all appropriate inquiries investigation was completed less than 180 days prior to the date of acquisition of the property or (2) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation and was completed less than 180 days prior to the date of acquisition of the property. A prospective property owner may use a previously conducted Phase I ESA Report: (1) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation for the same property; and (2) if the information was collected or updated within one year prior to the date of acquisition of the property; and (3) certain aspects of the previously conducted report are conducted or updated within 180 days prior to the date of acquisition of the property. These aspects include the interviews; on-site visual inspection; reviews of federal, tribal, state, and local government records; the search for environmental liens; and the declaration by the environmental professional responsible for the assessment or update.

1.4 Significant Assumptions, Limitations, and Exceptions

This report and review of the Subject Property is limited in scope. All appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information

and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of the ASTM 1527-21 practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing a Phase I ESA and the reduction of uncertainty about unknown conditions resulting from additional information. The appropriate level of inquiry will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry. This type of investigation is undertaken with the risk that the presence, full nature, and extent of contamination would not be revealed by visual observation and review of available data alone. The findings presented in this report were based on field observations and review of available data. Therefore, the data obtained is clear and accurate only to the degree implied by the sources and methods used. The information presented herewith was based on professional interpretation and on the data obtained.

1.5 Special Terms and Conditions and/or Additional Services

A Phase I ESA meeting or exceeding the ASTM 1527-21 practice and has all components completed less than 180 days prior to the date of acquisition (the date on which a person acquires title to the Subject Property) or the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different user than the User for whom the assessment was originally prepared, the subsequent user must also satisfy the User's Responsibilities set forth in Section 2.0. Users and environmental professionals may use information in prior Phase I ESAs provided such information was generated as a result of procedures that meet or exceed the requirements of ASTM 1527-21.

1.6 Reliance

This Phase I ESA has been prepared for and is intended for the use of Premier 40, LLC. The individual components of this report are valid as of the date they were produced or completed; the report should not be relied upon for information concerning changes in the condition of the property after the report was prepared.

2.0 USER RESPONSIBILITIES

The User should provide reasonably ascertainable land title records and judicial records for review for the existence of environmental liens, activity and use limitations (AUL), or other property use limitation, if any, that are currently recorded against the property. environmental lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 U.S.C. §§ 9607(1) & 9607(r) and similar state or local laws. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of hazardous substances or petroleum products may be present on a property, and that unrestricted use of the property may not be acceptable. Property use limitations are a limitation or restriction on current or future use of a property in connection with a response to a release, in accordance with the applicable regulatory authority or authorities that allows hazardous substances or petroleum products to remain in place at concentrations exceeding unrestricted use criteria. If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional, and before the site reconnaissance is conducted.

In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The User should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the property were not contaminated, and make a written record of such explanation. If the User is aware of any commonly known or reasonable ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate such information to the environmental professional before the site reconnaissance is conducted. Mr. Stefan Horstschraer, Premier Homes, completed a User Questionnaire on 5 August 2025, which is provided in Appendix A. A summary of his responses is provided below.

2.1 Environmental Liens, Activity and Use Limitations, and/or other Property Use Limitations

Mr. Horstschraer did not indicate any knowledge of environmental liens or activity and use limitations on the completed questionnaire.

2.2 Specialized Knowledge and Commonly Known or Reasonably Ascertainable Information

Mr. Horstschraer did not indicate specialized knowledge of the Subject Property on the completed questionnaire.

2.3 Valuation Reduction for Environmental Issues

Mr. Horstschraer marked "No" to the question regarding valuation reduction on the completed questionnaire.

3.0 SUBJECT PROPERTY INFORMATION

3.1 Subject Property Description

The property description referred to herein is based on a Placer County Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1. The Subject Property consists of 26.29 acres of land and is assigned Placer County Assessor's Parcel Number (APN) 045-161-033 in Loomis, California.

3.2 Physical Setting

Geologic maps and a current United States Geologic Survey (USGS) 7.5 Minute Topographic Series Map of the Rocklin Quadrangle, as well as observations made during our site reconnaissance were used to make interpretations regarding the physical setting of the Subject Property and the surrounding area. The elevation at the Subject Property ranges between approximately 350 and 400 feet above mean sea level (MSL) and is located in Township 11 North, Range 7 East, Section 21, Mount Diablo Base & Meridian.

3.3 Regional Geology

The Subject Property is located in Loomis, California, which borders the Sierra Nevada and Great Valley geomorphic provinces. According to the Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California (Gutierrez, 2011), the Subject Property is underlain by the Penryn Pluton. The Penryn Pluton is an Upper Jurassic granodiorite intrusive body that intruded into older metamorphic rock.



3.4 Groundwater Conditions

The Subject Property is located within the California Department of Water Resources (DWR) defined Sacramento River Hydrologic Region. Youngdahl reviewed information provided on the Department of Water Resources (DWR) Well Completion Report Map Application. According to a well completion report dated 3 September 2018 for a well located approximately 0.22 miles to the east of the Subject Property, the depth to first water was at 100 feet below the ground surface (bgs) with a static water level at 70 feet bgs. Groundwater flow direction was estimated from topographic contours on the 7.5 Minute Map of the Rocklin Quadrangle to be generally southwest towards the pond in the southwestern corner of the Subject Property.

3.5 Soil Conditions

The United States Department of Agriculture Natural Resources Conservation Service's Web Soil Survey was accessed on 15 August 2025. Soils present on the Subject Property include:

- 93.3% Andregg Coarse Sandy Loam, 2 to 9 percent slopes (Map Unit Symbol 106)
 Parent material is residuum weathered from granite, the unit is well drained, has a low runoff class, and is farmland of statewide importance.
- 6.7% Andregg Coarse Sandy Loam, 9 to 15 percent slopes (Map Unit Symbol 107)
 Parent material is residuum weathered from granite, the unit is well drained, has a low runoff class, and is farmland of statewide importance.

4.0 SITE RECONNAISSANCE

4.1 Purpose

A reconnaissance of the Subject Property and a windshield survey of the surrounding area were conducted by Youngdahl Consulting Group, Inc. on 11 August 2025. The Subject Property was visually and/or physically observed including the periphery of the Subject Property, interior of the Quonset hut and exterior of all structures at the Subject Property, and all adjacent properties. Views of the Subject Property at the time of the reconnaissance visit are presented as Figures 3 - 10.

4.2 Subject Property

Some features discussed in this section are shown on the Site Plan – Figure 2. The Subject Property consists of an existing single-family home (Fig. 7, Photo 9), a Quonset hut (Fig. 9, Photo 13), and two metal storage containers (Fig. 7, Photo 10). Two fuel containers were observed within the residence garage and several 5-gallon paint buckets were observed within the metal storage containers and near the residence. Rocklin Road was observed to run generally east-west through the northern portion of the Subject Property (Fig. 10, Photo 16). A pond was observed at the southwestern corner (Fig. 6, Photo 7) and a soil stockpile was observed to the north of the pond (Fig. 9, Photo 14). A septic system was observed to the north of the existing residence and a well was observed on the western portion of the Subject Property (Fig. 10, Photo 15). A pole-mounted transformer was observed on the northern property boundary.

Reconnaissance Item	Observed	Reconnaissance Observations (11 August 2025)
Structures	Yes	A single-family home and a Quonset hut.
Liquid Storage Systems (UST/AST)	No	None Observed.



Reconnaissance Item	Observed	Reconnaissance Observations (11 August 2025)
Drums	No	None Observed.
Other Containers	Yes	Fuel containers were observed within the garage and several paint buckets were observed in the metal storage containers and near the existing residence.
PCBs	No	A pole-mounted transformer was observed on the northern property boundary.
Pits/Ponds/Ditches/Caves/Streams/ Lagoons	Yes	A pond was observed at the southwest corner of the Subject Property.
Stained Soil/Pavement	No	None Observed.
Stressed Vegetation	No	None Observed.
Solid Waste (Mounds or depressions)	No	None Observed.
Waste Water (Discharge into drain/ditch/injection system/stream/adjacent property)	No	None Observed.
Wells (Dry/irrigation/injection/abandoned)	Yes	A private well was located near the western property boundary.
Other underground systems	No	None Observed.
Septic Systems	Yes	A septic system was observed to the north of the existing residence.

4.3 Adjacent Properties

North: A water storage tank and vacant land.

East: Vacant wooded land, Barton Road, and single-family residences.

South: Single-family residences. West: Single-family residences.

5.0 HISTORICAL SOURCES REVIEW

All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. The term "developed use" includes agricultural uses and placement of fill dirt. Standard historical sources shall be reviewed at approximately five-year intervals. In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to provide the following standard historical sources: aerial photographs, USGS topographic maps, local city directories, and fire insurance maps (Sanborn Maps). Standard historical sources may also include: property tax files, recorded land title records, building department records, and zoning/land use records.

5.1 Aerial Photographic Review

Aerial photographs for the years 1938, 1952, 1957, 1962, 1966, 1972, 1975, 1984, 1993, 1999, 2009, 2012, 2014, 2018, and 2022 were provided in the EDR Aerial Photo Decade Package (Appendix B). Interpretations were made in an effort to evaluate former uses of the Subject Property and adjacent areas, and to determine if any significant topographic or cultural changes

have occurred. All photographs were provided at a scale of 1" = 500'. Youngdahl reviewed aerial imagery available on Google Earth for significant changes to the Subject Property and vicinity. A summary of the photographs reviewed is provided below.

Date	Source	Subject Property	Adjoining Properties
September 1938	USDA	The Subject Property appears to be wooded land with some drainages visible. Rocklin Road runs through the northern portion of the Subject Property and an orchard is located on the northern portion of the Subject Property.	North: An orchard. East: Wooded land, Barton Road, and an orchard. South: Wooded land with trail roads. Bodies of water likely associated with mining activities are visible. West: Wooded land.
		Trail roads are visible within the	North: No significant changes are visible. East: Many of the trees in the formerly wooded area have been cleared.
July 1952	y Subject Property and the Subject		South: Structures are visible and many trees have been cleared. The bodies of water are no longer visible.
			West: Many of the trees have been cleared.
August 1957	USDA	A pond is located in the southwest corner.	North and East: No significant changes are visible. South and West: The pond continues onto the southern and western adjoining properties.
July 1962	USGS	No significant changes are visible.	No significant changes to the adjoining properties are visible.
August 1966	USGS	A small structure is visible on the western portion of the Subject Property.	No significant changes to the adjoining properties are visible.
July 1972	USDA	No significant changes are visible.	No significant changes to the adjoining properties are visible.
August 1975	USGS	No significant changes are visible.	East: The orchard appears to have been removed. North, South, and West: No significant changes are visible.
June 1984	USDA	A structure is visible on the northwest portion of the Subject Property. The orchard on the northern portion of the Subject Property has been removed. Construction is visible near the northeastern corner.	North: The orchard has been removed and a water storage tank has been constructed. East, South, and West: No significant changes are visible.

Date	Source	Subject Property	Adjoining Properties
May 1993	USGS/ DOQQ	A structure is visible on the northeastern portion of the Subject Property. Hobby sized orchards are visible in the northwest and northeast corners.	North and East: No significant changes are visible. South and West: Roads and structures associated with a subdivision have been constructed.
1999	USGS/ DOQQ	No significant changes are visible.	North and East: No significant changes are visible South and West: Additional structures are visible.
2009	USDA/ NAIP	The hobby sized orchards have been removed and the small structure on the western portion of the Subject Property is no longer visible. A soil stockpile is visible on the western portion of the Subject Property. A driveway associated with the northeastern structure has been paved.	North: A residence is under construction. East: A structure and a small patch of row crops are visible. South and West: Additional structures are visible.
2012	USDA/ NAIP	No significant changes are visible.	No significant changes to the adjoining properties are visible.
2014	USDA/ NAIP	No significant changes are visible.	No significant changes to the adjoining properties are visible.
2018	USDA/ NAIP	No significant changes are visible.	East: Single family residences have been constructed. North, South, and West: No significant changes are visible.
2022	USDA/ NAIP	A new structure or RV is visible on the northeastern portion of the Subject Property.	East: An additional structure is visible. North, South, and West: No significant changes are visible.
April 2025	Google Earth	The structure on the northwestern portion of the Subject Property has been removed. The second structure on the northeastern portion has been removed and two storage boxes are visible near the residence.	No significant changes to the adjoining properties are visible.

5.2 Review of Historical and Current USGS Topographic Maps

A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The EDR Historical Topographic Map Report (Appendix B) provided maps dated 1891 to 2021. Interpretations were made in an effort to evaluate former uses of the Subject Property and adjacent areas, and determine if any significant topographic or cultural changes have occurred.

Date	Map Name	Series	Comments
1891	Sacramento	30-Minute	A roadway is shown running through the northern portion of the Subject Property. A drainage features runs along the northwestern corner of the Subject Property and additional drainage features are shown to the north and south. A roadway is shown along the eastern property boundary.
1892	Sacramento	30-Minute	No significant changes to the Subject and adjacent properties are shown.
1893	Sacramento	30-Minute	No significant changes to the Subject and adjacent properties are shown.
1944	Auburn	15-Minute	The roadway running through the northern portion of the Subject Property and the roadway along the eastern property boundary are depicted as secondary highways. Dredge tailings are shown to the east and southwest.
1947	Auburn	15-Minute	No significant changes to the Subject and adjacent properties are shown.
1954	Rocklin	7.5-Minute	An unimproved road is shown in the southeast and southwest corners of the Subject Property. Orchards are shown on the northern and eastern adjoining properties. The tailings to the east and southwest are no longer shown.
1967	Rocklin	7.5-Minute	A pond is shown in the southwest corner of the Subject Property and continues onto the western adjoining property.
1981	Rocklin	7.5-Minute	The unimproved road is now shown to the south and is no longer shown within the southern corners of the Subject Property.
2012	Rocklin	7.5-Minute	Only major roadways, topography, and water features are depicted in this map. The central portion of the Subject Property is depicted as a wooded area. No significant changes to the adjacent property are shown.
2015	Rocklin	7.5-Minute	No significant changes to the Subject and adjacent properties are shown.
2018	Rocklin	7.5-Minute	No significant changes to the Subject and adjacent properties are shown.
2021	Rocklin	7.5-Minute	No significant changes to the Subject and adjacent properties are shown.

5.3 Historical City Directory Abstract Review

EDR provided the EDR-City Directory Image Report for review and a copy is provided in Appendix B. Building directories including city, cross reference and telephone directories were reviewed, if available, at approximately five-year intervals for the years spanning 1971 through 2022.

Address	Date	Directory Listing
5780 Rocklin Road (Subject Property)	1992, 2000, 2005, 2014	Residential

Address	Date	Directory Listing
5820 Rocklin Road (Subject Property)	1986, 1990, 1992, 1995, 2000, 2005, 2010, 2014	Residential
5779 Rocklin Road (Northern Adjoining Property)		Not listed
5470 Barton Road (Northern Adjoining Property)	1971, 1977, 1986, 1990	Residential
5500 Barton Road (Eastern Adjoining Property)		Not listed
5335 Barton Road (Eastern Adjoining Property)	2022	Residential
5341 Barton Road (Eastern Adjoining Property)	2022	Residential

5.4 Certified Sanborn Map Report

No Sanborn Map coverage was identified for the Subject Property.

5.5 Previous Phase I Environmental Site Assessments

A Phase I ESA was prepared by Earthtec, Ltd. (Earthtec), dated 18 February 2008, for the Subject Property and the eastern adjoining property. The report identified a mobile home on the northwest corner of the Subject Property, a residence at the northeast corner, and two metal storage structures to the south of the residence. The report states that the residence was constructed in 1984. Earthtec concluded that no recognized environmental conditions were identified for the Subject Property.

6.0 REGULATORY RECORDS REVIEW

The records review consisted of a review of reasonably ascertainable environmental record sources, physical setting sources, and historical use information that will help identify recognized environmental conditions in connection with the property. Reasonably ascertainable record information must be publicly available, obtainable from its source within reasonable time and cost constraints, and be practically reviewable.

6.1 Commercial Database Search Review

In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to identify sites listed on regulatory agency databases within approximate minimum search distances from the Subject Property with potential of existing environmental problems. The term "approximate minimum search distances" means the distances within the area which government records must be reviewed pursuant to ASTM Phase I Standards. The term "minimum search distance" is used in lieu of radius as to include irregularly shaped properties. A current EDR Radius Map with GeoCheck® (EDR Report) was provided by EDR on 6 August 2025 (Appendix C). Included in the report are the dates the original government sources were updated and the dates the sources were last updated by EDR, as well as a list of acronyms used by EDR.

Due to poor or inadequate information, EDR is unable to map certain sites. These sites are referred to by EDR as Orphans. Five Orphan sites were identified in the EDR Report.

The Proposed Costco Wholesale Warehouse and Fuel Facility is located 2 miles to the north of the Subject Property. Due to this distance, it is our opinion that this site has not impacted the Subject Property.

The Southern Pacific (Roundhouse) site is located over 2 miles to the west of the Subject Property. Due to this distance, it is our opinion that this site has not impacted the Subject Property.

The Sierra College Surplus Sites East and South were reviewed on the EnviroStor website. Soil contamination was identified on the property and the chemicals of concern listed for the site are arsenic and lead applied as an herbicide and lead from lead-based paint. Because the contamination is limited to the soil and the site is over one-half mile from the Subject Property, it is our opinion that this site has not impacted the Subject Property.

The Bath and Body Works #2663 site is located 2 miles from the to the north of the Subject Property. Due to this distance, it is our opinion that this site has not impacted the Subject Property.

The unnamed orphan site is located 2 miles to the west of the Subject Property. Due to this distance, it is our opinion that this site has not impacted the Subject Property.

City	EDR ID	Site Name	Address	Database(s)		
Loomis	S122495077	Proposed Costco	Southeast corner of	ENVIROSTOR,		
		Wholesale Warehouse and	Brace Road and Sierra	VCP		
		Fuel Facility	College Boulevard			
Rocklin	1003879731	Southern Pacific	Corner of First and	SEMS-		
		(Roundhouse)	Rocklin Road	ARCHIVE		
Rocklin	S121475152	Sierra College Surplus	Intersection of Sierra	ENVIROSTOR,		
		Sites East and South	College Boulevard and	VCP		
			Rocklin Road			
Rocklin	S129060577	Bath and Body Works	5108 Rocklin Common	CERS HAZ		
		#2663	Drive SPC 101	WASTE, HWTS		
Rocklin	S107540519	Unnamed	Rocklin P.D./4060	CDL		
			Rocklin Road			

A summary table of the sites listed on the databases searched by EDR is provided below. The Subject Property was not listed in the databases reviewed by EDR. A total of 6 sites were identified within minimum search distances of the Subject Property.

Database	Search Distance (Miles)	Target Property	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 - 1	>1	Total Plotted
ENVIROSTOR	1	0	1	0	1	1	NR	3
VCP	0.5	0	0	0	1	NR	NR	1
SCH	0.25	0	1	0	NR	NR	NR	1
CA PLACER CO. MS	0.25	0	1	0	NR	NR	NR	1
Totals		0	3	0	2	1	0	6

6.2 Review of State and/or Local Government Records

The Placer County NextRequest system was utilized to request any records pertaining to hazardous materials at the Subject Property. We were informed that no records for the Subject Property were identified.

The T-Mobile SC09955A site, located at 5779 Rocklin Road, was listed in the Placer County Master List (CA Placer Co. MS) database. The CA Placer Co. MS is a database of all facilities that are regulated, permitted, and/or inspected by the Placer County Environmental Health Department. A listing on this database is not considered to be indicative of a release of a hazardous material or petroleum product at a property. Based on the information reviewed, it is Youngdahl's opinion that this facility has not impacted the Subject Property.

The Loomis Union School District Future School Site, 5500 Barton Road, is located on the eastern adjoining property. This site is listed in the EnviroStor and SCH databases. Youngdahl reviewed records on the EnviroStor website. A Phase I ESA was performed on the site in June 2021 and no RECs were identified on the property. Therefore, it is our opinion that this site has not impacted the Subject Property.

The State of California Water Resources Control Board's GeoTracker database was researched to identify if sites with groundwater contamination exist within the minimum search distances to the Subject Property (www.geotracker.waterboards.ca.gov). Also, the Department of Toxic Substance Control's (DTSC) Envirostor database was researched for sites of environmental concern near or at the Subject Property (https://www.envirostor.dtsc.ca.gov/public/). The Subject Property was not identified on the GeoTracker or EnviroStor websites.

6.3 Vapor Encroachment Screening

Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) via soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. The vapor intrusion pathway is evaluated using the Conceptual Site Model (CSM) and vapor intrusion pathway screening. Volatilization of petroleum products in the subsurface occurs via the volatilization of constituents that are in the dissolved phase (in pore water or groundwater), volatilization from light nonaqueous phase liquid (LNAPL) (either mobile or residual) directly, and volatilization from impacted soil. Once the individual constituents are in the vapor phase, they can continue to migrate in the vadose zone (soil zone between first groundwater and ground surface). Transport will occur through diffusion caused by concentration gradients. The greatest movement will take place in the most permeable materials. If the soil-moisture content in the vadose zone is high, then relatively soluble compounds such as ethanol and MTBE will tend not to stay in the vapor phase, but rather will stay in the soil moisture.

Soil vapor is one of the pathways of contamination to the Subject Property, along with ground water and soil. ASTM E1527-21 requires that vapor migration be treated no differently than contaminated groundwater. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns. The ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-22) is the industry-accepted guidance for using Phase I ESA information to determine if a vapor encroachment condition (VEC) exists at the Subject Property. EDR's Vapor Encroachment Worksheet was designed to assist parties seeking to meet the search requirements of the ASTM E 2600-22. No sites of potential risk were discovered during completion of the EDR VES. A copy of the EDR VES is provided in Appendix D.

6.4 Other Environmental Records

The Department of Conservation Geologic Energy Management Division's Well Finder website was reviewed to identify locations with current or historical hydrocarbon production near the Subject Property. No wells within one-half mile of the Subject Property were identified (CalGEM, 2025).

The Subject Property is located within an area of minimal flood hazard (FEMA, 2025).

Youngdahl reviewed data provided on the National Pipeline Mapping System website and identified one pipeline within one-half mile of the Subject Property. The pipeline runs along Rocklin Road through the northern portion of the Subject Property, then turns south to follow Barton Road and runs along the eastern property boundary. It is noted as being operated by Pacific Gas and Electric, Co. and is reportedly an active natural gas transmission line (NPMS, 2025).

7.0 INTERVIEWS

7.1 Interviews with Past and Present Owners, Key Site Manager, and/or Occupant

Mr. Stefan Horstschraer, Premier Homes, completed a questionnaire regarding the Subject Property on 5 August 2025. A copy of the completed questionnaire is provided in Appendix A. Mr. Horstschraer stated that Premier 40, LLC acquired the Subject Property on 19 August 2021 from Dominican SMME Corporation. He indicated that the current and historical uses of the Subject Property have been for residential purposes and that an existing residence and a demolished mobile home have been located on the Subject Property. Mr. Horstschraer noted the presence of a soil stockpile that he believed was placed in 2007 and was sourced from the construction of a residence to the north. He stated that, to the best of his knowledge, no environmental liens have been recorded for the Subject Property.

7.2 Interviews with State and/or Local Government Officials

The Placer County Environmental Health Department was contacted via email on the Placer County Nextrequest website on 18 August 2025 and was requested to provide records regarding the Subject Property and nearby sites that may be of a concern. We were informed that no records pertaining to the Subject Property were identified.

8.0 COMMON CONTAMINANTS

8.1 Lead-based Paint

Lead is considered to be a harmful environmental pollutant. In late 1991, the Secretary of the Department of Health and Human Services called lead the "number one environmental threat to the health of children in the United States." Humans are exposed to lead through the air. drinking water, food, contaminated soil, deteriorating paint, and dust. Airborne lead enters the body by breathing or swallowing lead particles or dust once it has settled. Old lead-based paint is the most significant source of lead exposure in the U.S. Lead-based paint in the United States resulted in a court case against the Lead Industries Association. Due in great part to studies carried out by Philip J. Landrigan, paint containing more than 0.06% (by weight of dried product) lead was banned for residential use in the United States in 1978 by the U.S. Consumer Product Safety Commission (16 Code of Federal Regulations CFR 1303). Most homes and other buildings built before 1960 contain heavily leaded paint. Some homes built as recently as 1978 may also contain lead paint. DTSC implemented an "Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers" in 2006, which stated that schools constructed before 1 January 1993, should be evaluated for the presence of lead-based paint. The historical structures on the western portion

of the Subject Property were present prior to 1978 and the construction date of the Quonset hut is unknown; therefore, there is a potential that lead from lead-paint has impacted the soil around these structures.

8.2 Termiticides

Termiticides - organochlorine termiticides (OC termiticides) are a group of persistent pesticides that were formerly used for termite control in and around wooden structures from the mid-1940s to the late 1980s. These OC termiticides used in the past include chlordane, aldrin, dieldrin, heptachlor, and DDT. Chlordane and other organochlorine pesticides (OCPs) were commonly used as termiticides around structures until 1988. Above-ground use of chlordane was phased out between 1978 and 1983 by the United States Environmental Protection Agency (USEPA); although chlordane was used as a termiticide for wooden structures until it was prohibited in 1988. In 2004, the California Department of Toxic Substances Control (DTSC) evaluated OCPs in soil for proposed school sites on residential properties; finding chlordane in 98 percent of the samples, DDT in 95 percent, dieldrin in 71 percent, and heptachlor in 17 percent. DTSC implemented an "Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers" in 2006. The existing residence and the two historical structures on the western portion of the Subject Property were present prior to 1988; therefore, there is potential that organochlorine pesticides as termiticides were applied to soils around these structures. The Quonset hut is constructed out of metal, therefore OCPs applied as termiticides are not of concern around the structure.

8.3 Pesticides

Prior to 1950, the use of arsenical pesticides and herbicides as lead arsenate (LA) was the most extensively used of the arsenal insecticides. The search for substitutes for LA began when it was discovered in 1919 that contemporary practices for washing produce were failing to adequately remove arsenic residues (Shepard, 1939). Unfortunately, all of the tested alternative materials were found to provide less effective insect control or were more toxic to plants and animals. No adequate substitutes were found until 1947, when the synthetic organic insecticide dichlorodiphenyltrichloroethane (DDT) was introduced. Lead arsenate use in Washington State, USA, effectively terminated in 1948, when DDT became widely available to the public (Benson et al., 1968). Veneman et al. (1983) stated that LA use ceased in Massachusetts, USA, in the early 1950s. All insecticidal uses of LA in the USA were officially banned on 1 August 1988 (USEPA, 1988), with a comment that all registrations for insecticidal use had lapsed before that date.

Organochlorine pesticides (OCPs) were commonly used in the United States between the 1940s and 1970s for public health vector control, agricultural crop production, and pest control around structures. Although most OCPs were banned or withdrawn from use in the 1970s (including DDT), the compounds remain in the environment where surface soils associated with historical agricultural and termite control pesticides are present (DTSC, 2010). Based on aerial photography, an orchard was present on the northern portion of the Subject Property from at least 1938 and was removed by 1984. There is a potential that organochlorine pesticides, lead, and arsenic that may have been applied to the orchard on the northern portion of the Subject Property.

8.4 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls, or PCBs are a series of chemicals typically used as a heat transfer media, plasticizer, and other industrial uses. Due to PCBs having a high chemical and thermal stability and low solubility, they persist in the environment for decades and can become mobile

readily as they bind strongly to soils and travel via surface and groundwater. PCBs have been identified as probable human carcinogens and may cause a variety of non-cancer health effects. They are typically found in capacitors, electrical transformers, fluorescent light ballasts, and other equipment. As a plasticizer, it can also be found in caulking, mixed with polyvinyl chloride (PVC) plastic, neoprene, laminating, adhesives, sealants, paints, concrete, and other building materials. The EPA has recently raised awareness that schools and large apartment complex buildings constructed or renovated between 1950 and 1979 may have widespread occurrence of PCBs in caulk and other building material. The DTSC "Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers" recommends soil sampling in the vicinity of historical or current transformers that were installed before January 1, 1979. A pole-mounted transformer was observed along the northern boundary of the Subject Property. There is a potential that older transformers contained polychlorinated biphenyls (PCBs), which may have impacted the soil beneath the transformer.

8.5 Fill Dirt and/or Solid Waste

Fill dirt is defined by ASTM E1527-21 as: "dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities." This differs from the definition of solid waste, which is considered areas filled or graded by non-natural causes (or filled by fill of unknown origin) suggesting trash construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal. Stockpiled soil was observed on the western portion of the Subject Property. The current owner of the parcel indicated that the soil was placed on the Subject Property in 2007 and originated from a site to the north. The lack of historical information regarding the origin of the soil piles is a recognized environmental condition.

8.6 Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) are a group of thousands of chemicals that have been used in industry and consumer products since the 1940s. PFAS are referred to as "forever chemicals" because they contain carbon-fluorine bonds, which do not degrade easily in the environment. They are found in the manufacturing of cleaning products, water and stain resistant fabrics, nonstick cookware, food packaging and personal care products. In addition, PFAS compounds have been used in fire-fighting foams. The US Environmental Protection Agency has amended the Toxic Substances Control Act (TSCA) regulation with reporting and recordkeeping requirements for PFAS, which applies to anyone that manufactured or imported PFAS for a commercial purpose since 1 January 2011. EDR has begun to aggregate databases with listings for facilities where PFAS were reported or suspected to be used.

No listings were identified on PFAS databases searched by EDR (See Section 6.1).

The Subject Property owner indicated that they are not aware of the use of PFAS compounds on the Subject Property.

Youngdahl did not identify any historical information to indicate that products that may have contained PFAS were manufactured on the Subject Property. In addition, no information was located that indicated a fire had occurred on the Subject Property that may have included the use of firefighting foam.

8.7 Aerially-Deposited Lead (ADL)

Beginning in the 1920s, refiners began adding lead compounds to gasoline to reduce engine "knock" and allow higher engine compression. This would cause leaded gasoline engines to disperse lead-contaminated emissions along roadways, contaminating roadside soils and medians. Lead gasoline use diminished when the U.S. Environmental Protection Agency (EPA) established rules requiring unleaded gasoline to be used in new cars due to the introduction of catalytic converters, which control emissions; lead within the gasoline would destroy emission control capacity of the catalytic converters. By the early 1980s, gasoline lead levels declined by about 80%, and beginning in 1992, lead was banned as a fuel additive in California. ADLcontaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. The highest lead concentrations are usually found within 10 feet of the edge of the pavement and within the top six inches of the soil; it can be found within 30 feet of the edge of pavement, and in some cases, as deep as two to three feet below the surface. Rocklin Road runs through the northern portion of the Subject Property and has been present since at least 1938. Therefore, there is a potential that aerially deposited lead from the historical use of leaded gasoline has impacted the soil along Rocklin Road.

9.0 COMMON NON-SCOPE CONSIDERATIONS

Non-scope services include potential environmental conditions that may be present at the Subject Property that do not present potential CERCLA liability, and are beyond the scope of this practice. We have provided information regarding some non-scope items that may arise at the Subject Property below.

9.1 Regional Radon Values

Elevated radon gas levels in indoor air are a result of radon moving into buildings from the soil, either by diffusion or flow due to air pressure differences. The ultimate source of radon gas in buildings is the uranium naturally present in rock, water, and soil. Some rock types are known to contain more uranium than others. In California, most uranium deposits are relatively small in aerial extent and are located in rural areas. Consequently, the chance of severe radon levels (>200 Picocuries per Liter) occurring in buildings in California should be very low. The following rock units in California contain uranium in concentrations above the crustal average: the Monterey Formation, asphaltic rocks, marine phosphatic rocks, granitic rocks, felsic volcanic rocks, and certain metamorphic rocks. According to EPA publication 402-R-93-025, entitled EPA's Map of Radon Zones, California, dated September 1993, Placer County is shown to be in Zone 2. Zone 2 has a predicted average radon screening level of greater than or equal to 2 pCi/L and less than or equal to 4 pCi/L; this is considered to be an area of moderate potential for geologic radon.

The California Department of Health Services, California Indoor Radon Levels Sorted by Zip Code was last updated February 2016. The number of tests does not necessarily represent the number of houses tested. A single house may have had several tests conducted. The table contains both long-term and short-term indoor radon measurements. The California Department of Health Services recommends that you take action to reduce radon levels in your house if they are 4pCi/L or greater. Of the 91 tests conducted for Zip Code 95650, 3 were equal to or greater than 4pCi/L.

9.2 Asbestos Containing Building Materials

Asbestos is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties. They all have in common their eponymous, asbestiform habit: long, thin fibrous crystals. The prolonged inhalation of asbestos fibers can cause serious

illnesses including malignant lung cancer, mesothelioma, and asbestosis. Asbestos became increasingly popular among manufacturers and builders in the late 19th century because of its sound absorption, average tensile strength, its resistance to fire, heat, electrical and chemical damage, and affordability. It was used in such applications as electrical insulation for hotplate wiring and in building insulation. When asbestos is used for its resistance to fire or heat, the fibers are often mixed with cement (resulting in fiber cement) or woven into fabric or mats.

Most products manufactured today do not contain asbestos. In the industrialized world, asbestos was phased out of building products mostly in the 1970s with most of the remainder phased out by the 1980s. Asbestos containing building materials in residences includes a variety of products, such as: stipple used in textured walls and ceilings; drywall joint filler compound; asbestos contaminated vermiculite, vinyl floor tile; vinyl sheet flooring; window putty; mastic; cement board; furnace tape; and stucco. Asbestos was used a lot in roofing materials, mainly corrugated asbestos cement roof sheets and asbestos shingles. Other sources of asbestos containing materials include fireproofing and acoustic materials. On July 12, 1989, EPA issued a final rule banning most asbestos-containing products. In 1991, this regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans. As a result of the Court's decision, the following specific asbestos-containing products remain banned: flooring felt, roll board, and corrugated commercial, or specialty paper. In addition, the regulation continues to ban the use of asbestos in products that have not historically contained asbestos, otherwise referred to as "new uses" of asbestos. For buildings constructed prior to 1980 (Code of Federal Regulations 29 CFR 1926.11) all thermal system insulation and surface materials must be designated as presumed asbestos-containing building materials (ACBM) unless proved otherwise through sampling. No structures currently located on the Subject Property were constructed prior to 1980; therefore, it is our opinion that ACBM is not of concern.

9.3 Treated Wood Waste

Wood that has been preserved using chemicals that are meant to protect the wood from insect attack and fungal decay during its use is commonly preserved with hazardous chemicals that pose a risk to human health and the environment. Some of the toxic or carcinogenic chemicals used in the preservation process include arsenic, chromium, copper, creosote, and pentachlorophenol. When this preservative-treated wood has reached the end of its service life, it is considered treated wood waste (TWW) (California Department of Toxic Substances Control, Requirements for Treated Wood Waste, December 2008). If TWW is not properly disposed, the chemicals it contains can leach out of the wood and contaminate surface water and groundwater, posing a risk to human health and the environment. Exposure to the harmful compounds within TWW can occur through dermal contact or from inhalation or ingestion of particles (e.g., sawdust and smoke).

The statute (HSC 25150.7) and regulations (22 CCR 67386.1 et seq.) that allow treated wood waste to be handled with Alternative Management Standards (AMS) expired on December 31, 2020. After that date, all hazardous treated wood waste (not exempted by HSC 25143.1.5 as utility generated) managed in California has to be stored and manifested as hazardous waste and transported to class I hazardous waste landfills for disposal. On August 31, 2021, Assembly Bill 332 had taken affect, adopting new AMS for treated wood waste that are codified in Health and Safety Code section 25230. More information regarding TWW can be found on the September 2021 Fact Sheet – Requirements for Generators of Treated Wood Waste (TWW) (DTSC, 2021). Treated wood waste was not observed on the Subject Property.



9.4 Substances Not Defined as Hazardous Substances

Hazardous substance is defined in ASTM 1527-21 § 3.2.36 as "those substances defined as hazardous substance pursuant to CERCLA 42 U.S.C. § 9601(14), as interpreted by EPA regulations and the courts." There are some substances that non-environmental professionals and others may assume to be hazardous substances that are not defined (or not yet defined) as hazardous substances under CERCLA through interpretation by EPA regulations and the courts. These substances may include: (1) some substances that occur naturally through biological digestion (for example, methane), and (2) substances about which human understanding is evolving (for example, per- and polyfluoroalkyl substances, also known as "PFAS"). These and any other "emerging contaminants," where they are not identified as a hazardous substance by CERCLA, as interpreted by EPA regulations and the courts, are not included in the scope of this practice. Some of these substances may be considered a "hazardous substance" (or equivalent) under applicable state laws. In those instances, where a Phase I ESA is performed to satisfy both federal and state requirements, or as directed by the user of the report, it is permissible to include analysis and/or discussion of these substances in the same manner as any other Non-Scope Consideration.

10.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This Phase I ESA was performed for The Reserve, located at 5780 Rocklin Road in Loomis, California. The Subject Property is identified by Placer County APN 045-161-033. This Phase I ESA was conducted for Premier 40, LLC. Our study consisted of an environmental record sources review, physical setting sources review, site related documents review, historical use information review, interviews, and a site reconnaissance. We have performed a Phase I ESA in conformance with the scope and limitation of ASTM Standard Practice E 1527-21. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

10.1 Recognized Environmental Conditions (RECs)

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "(1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment." The following recognized environmental conditions were identified in connection with the Subject Property:

- On-site concerns were noted from the potential presence of lead from lead-based paint that may have been used in the construction and/or maintenance of the western structures and the Quonset hut on the eastern portion of the Subject Property.
- On-site concerns were noted from the potential presence of organochlorine pesticides that may have been applied as termiticides in surface soils in the vicinity of the western structures and the eastern residence.
- On-site concerns were noted from the potential presence of organochlorine pesticides, lead, and arsenic that may have been applied to the orchard on the northern portion of the Subject Property.
- There is a potential that aerially deposited lead from the historical use of leaded gasoline has impacted the soil around Rocklin Road on the northern portion of the Subject Property.
- On-site concerns were noted from the presence of a pole-mounted transformer on the northern property boundary and the potential that older transformers contained polychlorinated biphenyls (PCBs).

On-site concerns were noted from the presence of a soil stockpile observed on the western portion of the Subject Property. The current owner of the parcel indicated that the soil was placed on the Subject Property in 2007 and originated from a site to the north. The lack of historical information regarding the origin of the soil piles is a recognized environmental condition.

10.2 Historical Recognized Environmental Conditions (HRECs)

Historical recognized environmental conditions (HRECs) are a term used to state that the property has had a previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Subject Property to any controls. **This assessment did not identify any HRECs in connection with the Subject Property.**

10.3 Controlled Recognized Environmental Conditions (CRECs)

The term 'controlled REC' (CREC) describes a REC that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls. This assessment did not identify any CRECs in connection with the Subject Property.

10.4 De Minimis Conditions (DMCs)

De minimis conditions (DMCs) are those situations that do not present a threat to human health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority. This assessment did not identify any DMCs in connection with the Subject Property.

10.5 Recommendations

It is the opinion of Youngdahl Consulting Group, Inc. that soil sampling should be performed around the existing and historical structures, in the historical orchard, around Rocklin Road, from beneath the pole-mounted transformer on the northern portion of the Subject Property, and from the soil stockpile.

10.6 Significant Data Gaps

According to § 3.3.19 of ASTM Standard E1527-21, a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. A significant data gap (ASTM E1527-21 § 3.3.78) is a data gap that affects the ability to identify RECs. It is our opinion that no data gaps or significant data gaps were discovered during preparation of this report.

10.6.1 Data Failures

According to § 3.8.6 of ASTM Standard E1527-21, a data failure occurs when all standard historical resources that are reasonably ascertainable have been reviewed but the environmental professional is unable to identify a complete history of the previous uses of the Subject Property. It is our opinion that no data failures occurred during the preparation of this report.

11.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, the reviewer meets the definition of Environmental professional as defined in § 312.10 of 40 C.F.R. § 312" and 12.14.2. The reviewer has the specific qualifications based on education, training, and experience to



assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

David C. Sederquist, C.E.G., C. HG.

Professional Geologist - California No. 4715; Certified Engineering Geologist, California No. 2133; Certified Hydrogeologist; California No. 619

Bachelor of Arts in Geology; California State University, Sacramento, 1980

Mr. Sederquist has performed Phase I and Phase II Environmental Site Assessments for commercial, residential, public utility and school projects since 1990. He has assessed, monitored, and closed soil and groundwater contamination sites. He is experienced in working closely with both regulatory officials and property owners/purchasers.

Allie Denny

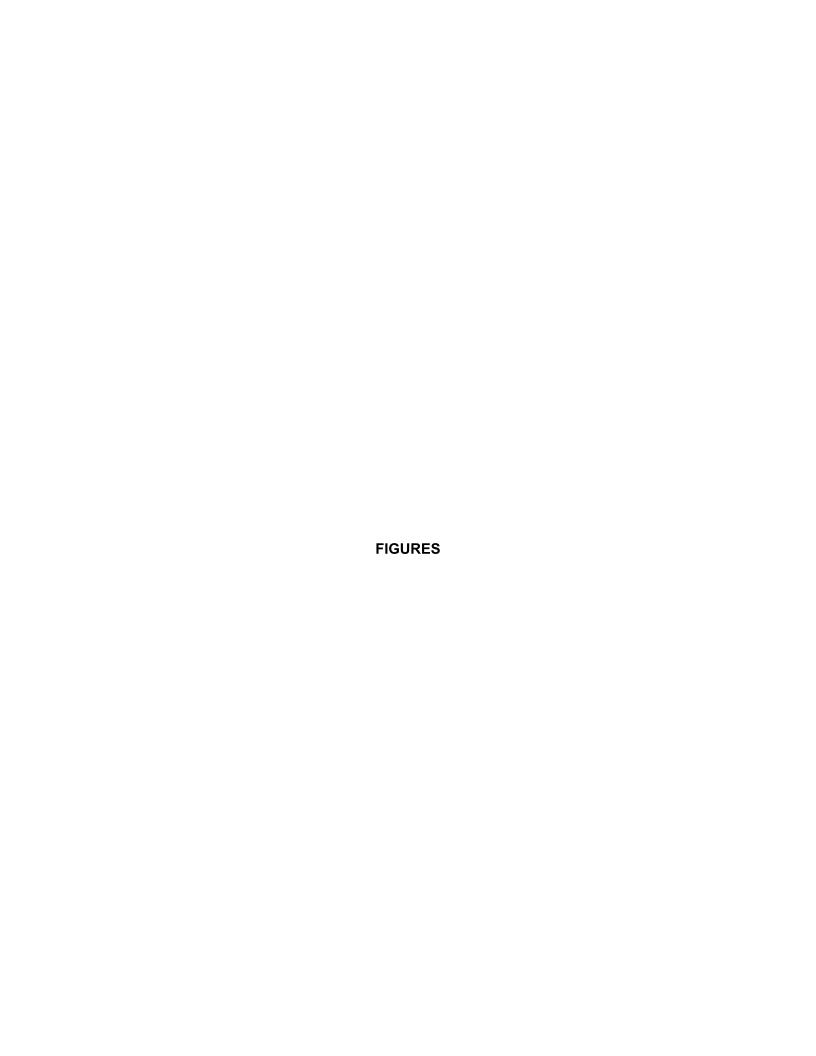
Geologist-In-Training – California GIT No. 1652 Bachelor of Science in Geology; University of California, Los Angeles, 2020

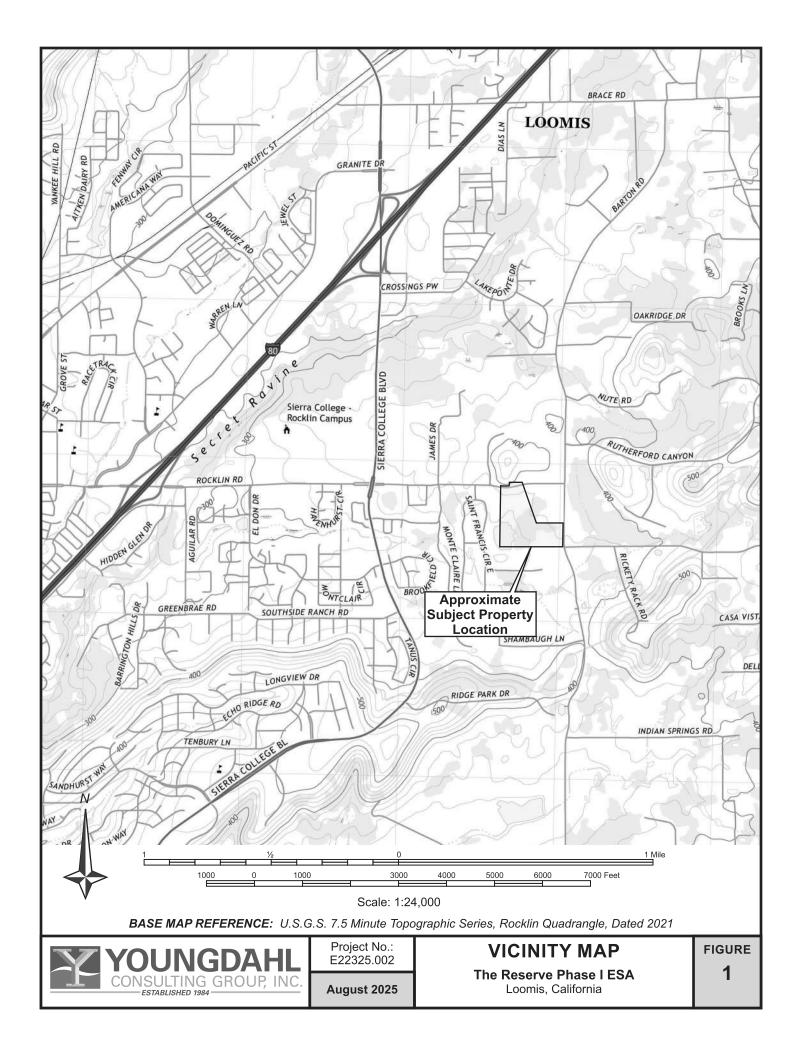
Ms. Denny has performed Phase I and Phase II Environmental Site Assessments in the Sacramento Valley since 2022. She has experience preparing site assessments on a variety of projects including undeveloped land, residential, and commercial properties.

12.0 SELECTED REFERENCES

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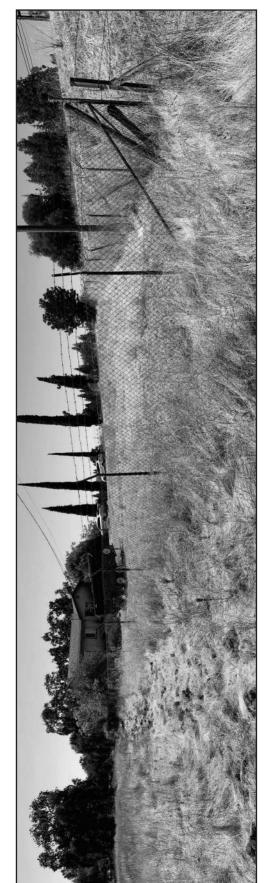


Photo 1: View of the Subject Property from the northeast corner.

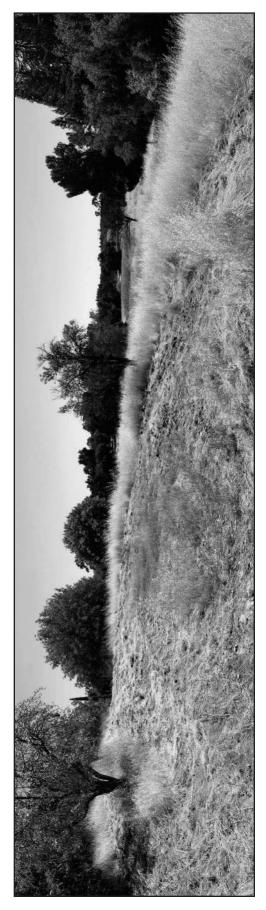


Photo 2: View of the Subject Property from the northwestern corner.



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The Reserve Phase I ESA Loomis, California



Photo 3: View of the Subject Property from the southeast corner.



Photo 4: View of the Subject Property from near the southwest corner.



SITE PHOTOGRAPHS



Photo 5: A water storage tank to the north of the Subject Property.



Photo 6: Barton Road and residences to the east of the Subject Property.





Photo 7: Residences to the south and a pond in the southwest corner of the subject property.



Photo 8: A residence to the west of the Subject Property.





Photo 9: The residence on the northeastern portion of the Subject Property.



Photo 10: Storage containers to the west of the residence.



SITE PHOTOGRAPHS



Photo 11: View inside the garage.



Photo 12: View inside the Quonset hut.



Project No.: E22325.002

August 2025

SITE PHOTOGRAPHS

The Reserve Phase I ESA Loomis, California **FIGURE**



Photo 13: A quonset hut to the south of the residence on the eastern portion of the subject property.



Photo 14: A soil stockpile on the western portion of the Subject Property.

SITE PHOTOGRAPHS



Photo 15: A well observed on the western portion of the Subject Property.



Photo 16: Rocklin Road running through the northern portion of the Subject Property.



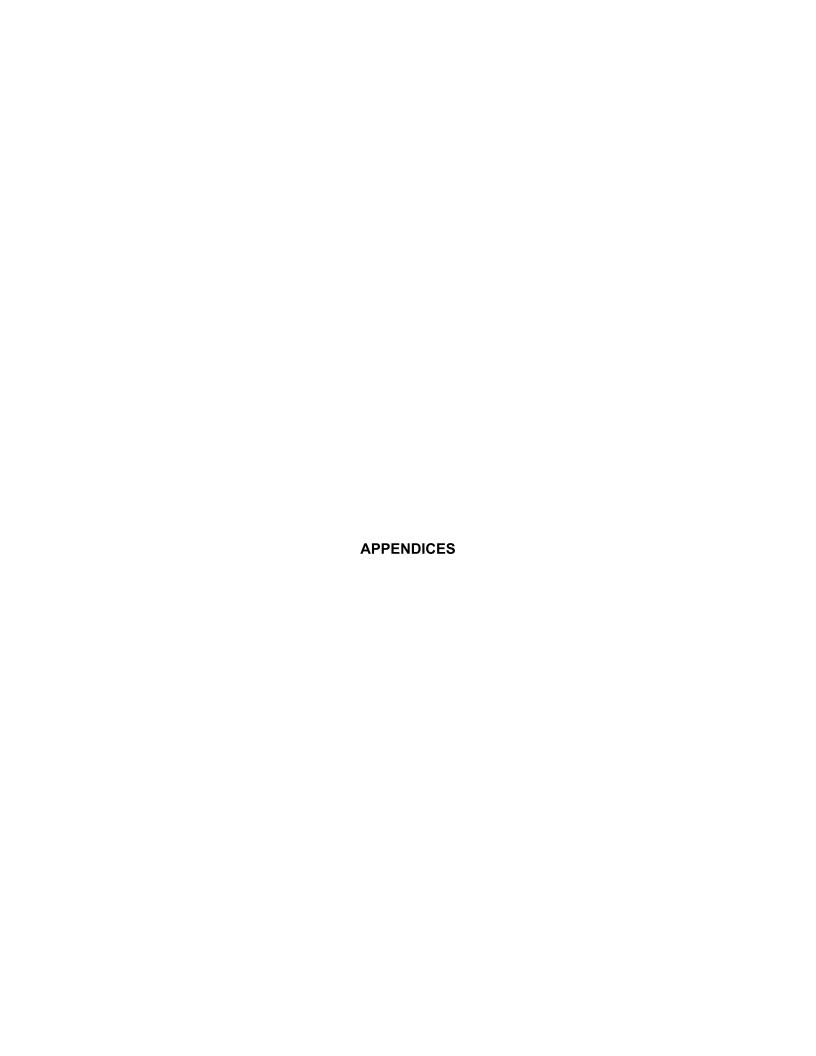
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August 2025

SITE PHOTOGRAPHS

The Reserve Phase I ESA Loomis, California **FIGURE**

10



APPENDIX A

Phase I ESA Questionnaire User Questionnaire



Project: Site Name: Rocklin Road (5780) Phase I ESA

Location: Loomis, California

Placer County APN 045-161-033

Phase I ESA Owner Questionnaire

Please have someone who is knowledgeable regarding the use and condition of the property fill out this questionnaire. We ask that you take time to complete this questionnaire to the best of your knowledge. This information will be used to make determinations regarding the past and present use of the property and will help us provide our opinions regarding the status of the property

We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to Nancy Malaret at Nancy.Malaret@youngdahl.net or David Sederquist at dcs@youngdahl.net

1. Who owns the Subject Property?

Premier 40, LLC, 8483 Douglas Plaza Drive, Suite 110, Granite Bay, CA 95746

- 2. How long have you owned/occupied/farmed the Subject Property (give specific dates)? Since 8/19/2021
- 3. Who was the Subject Property purchased from? Dominican SMME Corporation
- 4. What was the historical use of the Subject Property? If agricultural, please provide types of crops. Please provide relevant dates.

Residential

5. Have there been any structures on the Subject Property? If yes, please list. Please include construction and demolition dates. Can you provide site plans or drawings that show where the structures are or were located?

structures are or were located?

A main home (still existing) and a (demolished) mobile home. Both visible on overhead imagery.

Requested any past permit records from Town of Loomis. Premier tore down the mobile home a couple of years ago. Also a small guesset but for storage of a tractor.

years ago. Also a small quonset hut for storage of a tractor. 6. What is the current use of the Subject Property?

Residential

7. Currently is, or in the past has, the Subject Property or any *adjoining* property been used for an industrial use?

Not to our knowledge

8. Currently is, or in the past has, the Subject Property or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?

No







For the following questions, please provide specific information for any "yes" responses.

9. Has any soil been stockpiled on or fill material been brought onto the Subject Property? (Please provide information regarding the origin of any soil or fill dirt that has been imported or stockpiles that are present.)

Yes No Unknown

See Youngdahl soils report. Per Google Earth, the clay soils seem to have been placed in the summer of 2007 concurrent with construction of the large residence to the north on Poppy Ridge Court. We believe the dirt might have been intended to line the bottom of the pond.

10. Are you aware of the use or storage of Per- and Polyfluoroalkyl Substances (PFAS) on the Subject Property? PFAS are commonly used in the manufacturing of water and stain resistant fabrics and materials, cookware, and food packaging. In addition, PFAS are used in fire-fighting foams.

Yes No Unknown

11. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the Subject Property or any adjoining property in connection with waste treatment or waste disposal?

Yes No Unknown

12. Is there currently, or to the best of your knowledge has there been previously, any stained soils on the Subject Property?

Yes No Unknown

13. Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the Subject Property?

Yes No Unknown

14. Are there currently, or have there been previously, any industrial <i>drums</i> (typically 55 gal (208 L)) or sacks of chemicals located on the Subject Property?
Yes No Unknown
15. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the Subject Property?
Yes No Unknown
16. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes or access ways indicating a fill pipe protruding from the ground on the Subject Property or adjacent to any structure located on the Subject Property?
Yes No Unknown
17. Are there currently, or have there been previously, any flooring, drains, or walls located within any Subject Property structure that are stained by substances other than water or are emitting unusual odors?
Yes No Unknown
18. If the Subject Property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?
Yes No Unknown
There is an existing well in the northwest area of the site (just below where the mobile home used to be). As there were no well records at the county. Premier conducted a flow test resulting in only 7 gal/minute sustained flow. Intend is to abandon the well in place. Hence, no water tests were conducted.

19. Are you aware of any floor drains or sumps on the Subject Property?
Yes No Unknown
20. Are there any transformers, capacitors, or hydraulic equipment (i.e., hydraulic lifts) on the property which may contain PCBs?
Yes No Unknown
21. Do you have any knowledge of <i>environmental liens</i> with respect to the Subject Property?
Yes No Unknown
22. Have you been informed of the past or current existence of environmental violations with respect to the Subject Property?
Yes No Unknown
23. Have any hazardous substances or petroleum products, unidentified waste materials, tires automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the Subject Property?
Yes No Unknown
24. Do you have any Phase I Environmental Site Assessment or other environmental reports for the Subject Property? If yes, please provide copies for review.
2000 Phase 4.9.2 FCA by Forthton (provided via desymbol)

2008 Phase 1 & 2 ESA by Earthtec (provided via download)

What company or agency provides the following utilities to the Subject Property or the Subject Property vicinity:

Electricity? PGE

Natural gas? PGE

Sanitary Sewer? SPMUD

Potable water? PCWA

Are there any wells (monitor, irrigation, or potable) on the site? Yes, see above.

Are there any septic tanks on the site? Yes, see tracing plan provided via download

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

_			_	_	_
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RELATIONSHIP TO SITE: Owner	Owner's Representative X
PHONE NUMBER: 209-256-1971	EMAIL:stefan@premierhomesca.com
FIRM: Premier Homes	TITLE: VP Development
NAME (PRINT) Stefan Horstschraer	SIGNATURE & DATE
This questionnaire was completed by:	Horstsche 8/5/2025



Project: Site Name: <u>The Reserve Phase I ESA</u>

Location: Loomis, California

Placer County APN 045-161-033

User Questionnaire

The ASTM Standards require that the *User* of the report, Premiere 40, LLC, a California Limited Partnership, or your representative, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to Nancy Malaret at Nancy.Malaret@youngdahl.net or David Sederquist at dcs@youngdahl.net

1.	Do you have any knowledge of <i>environmental liens</i> with respect to the Subject Property?	Yes	No	Unknown
2.	Do you have any knowledge of activity and use limitations with respect to the Subject Property?	Yes	No	Unknown
3.	Do you have any <i>specialized knowledge</i> or experience related to the Subject Property or nearby properties? For example, are you involved in the same line of business as the current or former <i>occupants</i> of the <i>subject</i> or <i>adjoining properties</i> so that you would have specialized knowledge of the chemicals and processes used by this type of business?	Yes	No	Unknown
4.	Have you been informed of the past or current existence of environmental violations with respect to the Subject Property?	Yes	No	Unknown
5.	Is the purchase price or appraised value of the Subject Property significantly less than comparable properties in the vicinity?	Yes	No	Unknown





6.	Are you aware of commonly known or reasonably ascertainable information about the Subject Property that would help the environmental professional to identify conditions indicative of releases or threatened releases?	Yes	No	Unknown
7.	Do you know the past uses of the Subject Property? If yes, what were they?	Yes	No	Unknown
8.	Based on your knowledge and experience related to the Subject Property are there any obvious	Yes	No	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

indicators that point to the presence or likely presence of contamination at the Subject Property?

This questionnaire was completed by:

		110 (0)
NAME (PRINT):	Stefan Horstschraer	(SIGNATURE):
TITLE:	VP Development	ADDRESS: 8483 Douglas Plaza Drive, Granite Bay, CA 95746
FIRM:	Premier Homes	DATE : 8/5/2025
PHONE NUMBER:	209-256-1971	FAX NUMBER:

Horstsche

APPENDIX B

EDR Aerial Photo Decade Package EDR Historical Topographic Map Report EDR-City Directory Abstract Certified Sanborn® Map Report (No Coverage)

The Reserve

5820 Rocklin Road Loomis, CA 95650

Inquiry Number: 8070886.8

August 07, 2025

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

08/07/25

Site Name: Client Name:

The Reserve Youngdahl Consulting Group 5820 Rocklin Road 1234 Glenhaven Court Loomis, CA 95650 EDR Inquiry # 8070886.8 Contact: Nancy M Malaret



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2022	1"=500'	Flight Year: 2022	USDA/NAIP
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
1999	1"=500'	Flight Year: 1999	USGS/DOQQ
1993	1"=500'	Acquisition Date: May 22, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 08, 1984	USDA
1975	1"=500'	Flight Date: August 25, 1975	USGS
1972	1"=500'	Flight Date: July 06, 1972	USDA
1966	1"=500'	Flight Date: August 04, 1966	USGS
1962	1"=500'	Flight Date: July 29, 1962	USGS
1957	1"=500'	Flight Date: August 24, 1957	USDA
1952	1"=500'	Flight Date: July 22, 1952	USGS
1938	1"=500'	Flight Date: September 10, 1938	USDA

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