

<p style="text-align: center;">MITIGATED NEGATIVE DECLARATION OF THE SOLANO COUNTY DEPARTMENT OF RESOURCE MANAGEMENT</p>

PROJECT TITLE:

STEIGER LANDS – MINOR SUBDIVISION APPLICATION NO. MS-20-02

PROJECT DESCRIPTION AND LOCATION:

The property is located at the southwest corner of Joslin Lane and Steiger Hill Road, in unincorporated Vacaville, California. The project proposes to subdivide 22.974 acres into 4 parcels, approximately 5 acres or more in size, within the Rural Residential 2.5-acre minimum zoning district; APN: 0105-190-090

FINDINGS:

The Solano County Department of Resource Management has evaluated the Initial Study which was prepared in regards to the project. The County found no potentially significant adverse environmental impacts likely to occur. The County determined that the project qualifies for a Mitigated Negative Declaration. The Initial Study of Environmental Impact, including the project description, findings and disposition, are attached.

MITIGATION MEASURES INCORPORATED INTO PROJECT DESCRIPTION:

Mitigation measure Bio - 1:

- A. If construction activities are scheduled to occur during the breeding season (February 1- August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential suitable nesting habitat within 0.5 miles of active construction areas, including trees, shrubs, grassland and wetland vegetation. The qualified wildlife biologist shall determine the timing of the preconstruction surveys based upon the time of year and habitats that are present. The qualified wildlife biologist shall conduct surveys no more than 30 days prior to construction.
- B. If active nests are found, maintain a no disturbance buffer zone around the active nests during the breeding season or until it is determined that the young have fledged. The no disturbance buffer zone from active Swainson Hawk nest(s) or any protected avian specie shall be 0.5 miles or as may otherwise be determined by the Planning Services Division, Department of Resource Management, in consultation with a qualified biologist, USFWS and CDFW as appropriate.

Mitigation Measure Bio - 2

Development, construction or trenching within 5 feet of the dripline of the cluster of Oak Trees on Lot 1, 3 and 4, is prohibited and remain undisturbed. The parcel map shall include a such notation under supplemental notes.

Mitigation Measure CR – 1:

In the event that presently undocumented buried archeological deposits are encountered during any Project-associated construction activity, work must cease within 50-foot radius of the discovery. A qualified archeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission which will in turn appoint a Most Likely Descendent (MLD) to act as a Tribal Representative. The MLD will work with the subdivider and a qualified archeologist to determine the proper treatment of the human remains and associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via project construction design change.

Mitigation measure Haz – 1

On the parcel map, delineate the 30-foot setback (defensible space) from the property lines as shown on the tentative map, required by Cal Fire Regulations and include a note that the property is located within the State Responsibility Area for wildfire. Compliance with the Cal Fire adopted regulations (Cal Code reg. Title 14 Sec 1270 et seq) could minimize the risk of loss, injury or death involving wildfire.

Mitigation measure WS - 1:

Prior to the recordation of the parcel map, complete all engineering and construction related to the public water system, according to the terms of agreement with the Rural North Vacaville Water District, in compliance with the rules and regulations of the Rural North Vacaville District. Submit evidence to the Department of Resource Management that the engineering plans and necessary infrastructure installation are complete to the satisfaction of the Rural North Vacaville Water District.

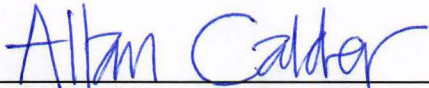
Mitigation measure Noise – 1:

Construction activity is limited to weekdays during the hours of 8 a.m. to 5 p.m., Monday through Friday; and 9 a.m. to 4 p.m. on Saturdays, and no work should occur on Sundays and Federal holidays. In order to ensure future buyers are aware of the noise restrictions,

the final map shall include a note indicating the noise restriction for construction activities.

PREPARATION:

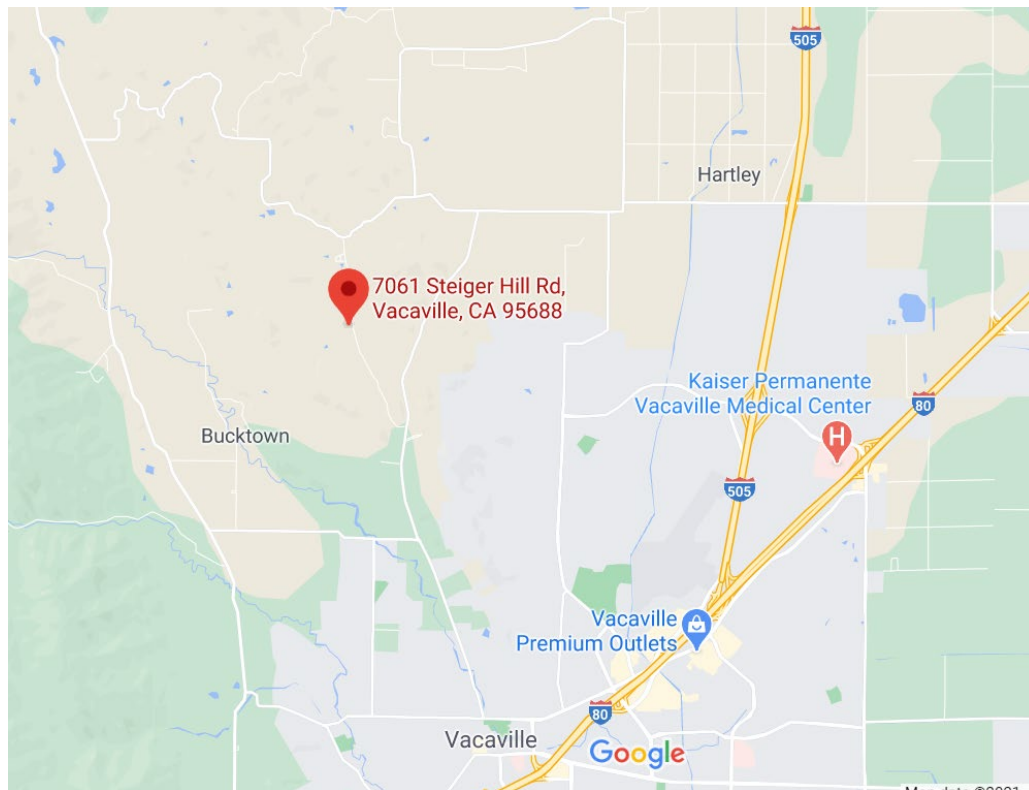
This Mitigated Negative Declaration was prepared by the Solano County Department of Resource Management. Copies may be obtained at the address listed below or at www.solanocounty.com under Departments, Resource Management, Documents, Departmental Reports.



Allan Calder, Planning Program Manager
Solano County Dept. of Resource Management
675 Texas Street, Suite 5500, Fairfield, CA 94533
(707) 784-6765

Norcal Properties Minor Subdivision STEIGER LANDS MS-20-02

Draft Initial Study and Mitigated Negative Declaration



April 2021

**Prepared By
Department of Resource Management
County of Solano**

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DEPARTMENT OF RESOURCE MANAGEMENT PART II OF INITIAL STUDY OF ENVIRONMENTAL IMPACTS

Introduction

The following analysis is provided by the Solano County Department of Resource Management as a review of and supplement to the applicant's completed "Part I of Initial Study". These two documents, Part I and II, comprise the Initial Study prepared in accordance with the State CEQA Guidelines, Section 15063.

Project Title:	Steiger Lands - Minor Subdivision
Application Number:	MS-20-02
Project Location:	7061 Steiger Hill Road, at the southwest corner of Joslin Lane and Steiger Hill Road, within unincorporated Vacaville.
Assessor Parcel No.(s):	0105-190-090
Project Sponsor's Name and Address:	Norcal Property Management LLC 102 Vine Street, Vacaville, CA 95688

General Information

This document discusses the proposed project, the environmental setting for the proposed project, and the impacts on the environment from the proposed project and any measures incorporated which will minimize, avoid and/or provide mitigation measures for the impacts of the proposed project on the environment.

- ☐ Please review this Initial Study. You may order additional copies of this document from the Planning Services Division, Resource Management Department, County of Solano County at 675 Texas Street, Fairfield, CA, 94533.
- ☐ We welcome your comments. If you have any comments regarding the proposed project please send your written comments to this Department by the deadline listed below.
- ☐ Submit comments via postal mail to

Planning Services Division
Resource Management Department
Attn: Nedzlene Ferrario, Senior Planner
675 Texas Street, Suite 5500
Fairfield, CA 94533

- ☐ Submit comments via email to: nferrario@solanocounty.com
- ☐ **Submit comments by the deadline of: June 4, 2021**

Next Steps

After comments are received from the public and any reviewing agencies, the Department may recommend that the environmental review is adequate and that a Mitigate Negative Declaration be adopted or that the environmental review is not adequate and that further environmental review is required.

ENVIRONMENTAL DETERMINATION

On the basis of this initial study:

- ☐ I find the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project proponent has agreed to revise the project to avoid any significant effect. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find the proposed project could have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT (EIR)** is required.
- ☐ I find the proposed project could have a significant effect on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based on the previous analysis as described in the attached initial study.
An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.
- ☐ I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are included in the project, and further analysis is not required.

INCORPORATION OF MITIGATION MEASURES INTO THE PROPOSED PROJECT

By signature of this document, the project proponent amends the project description to include the mitigation measures as set forth in Section 2.

4/23/21

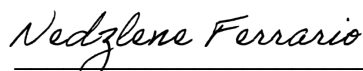
Date



Marco Martin Del Campo
Norcal LLC

4/26/2021

Date



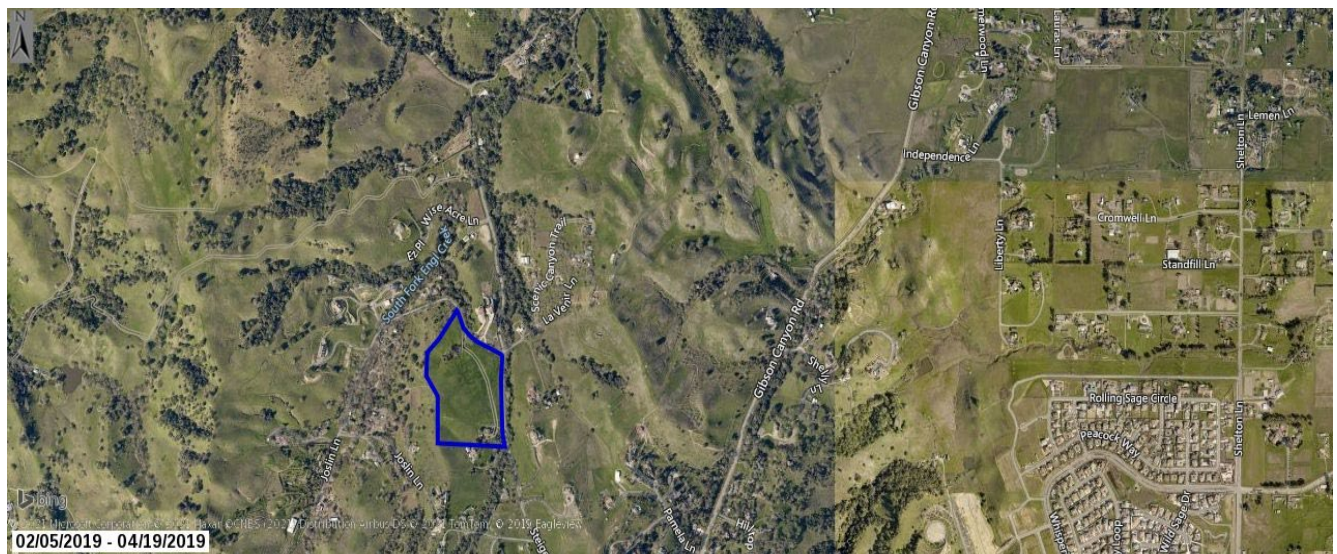
Nedziene Ferrario
Senior Planner

1.0 ENVIRONMENTAL SETTING and PROJECT DESCRIPTION

1.1 ENVIRONMENTAL SETTING:

The 23-acre property is located at the southwest corner of Steiger Hill Road and Joslin Lane, within the unincorporated portion of Vacaville, California. The property is developed with a residence and several outbuildings, located on the southwestern portion of the site. The site is predominantly grasslands with a cluster of significant sized Oaks and riparian trees on the northwestern and southern portion of the site. There is a notable hill on the property (approx. 2% -30% slope), two (2) ephemeral creeks and one (1) intermittent creek.

Project Location



1.2 PROJECT DESCRIPTION:

The applicant is proposing to subdivide the 23-acre property, zoned Rural Residential 2.5 acre minimum (RR 2.5) in to four(4) lots that are more than 5 acres in size; Lot 1 – 6 acres, Lot 2 – 5.118 acres, Lot 3 – 5.288 acres and Lot 4 – 5.137 acres. The larger sized lots are preferred by the applicant to be compatible with the surrounding neighborhood and to accommodate homes larger than 3000 square feet in size. Access is proposed off Joslin Lane or Steiger Hill Road, both public roads. Individual septic systems and public water service by the Rural North Vacaville Water District are proposed. The property is located outside of the Rural North Vacaville Water District and annexation approval by the Solano Local Agency Formation Commission, into the District is required prior to final map recordation.

The project proposes lot sizes greater than 5 acres and has the potential to be resubdivided into 2.5 acre lots. If the property or lots are resubdivided in the future, additional CEQA analysis may be required.

1.2.1 ADDITIONAL DATA:

NRCS Soil Classification:	Millsholm Series
Agricultural Preserve Status/Contract No.:	
Non-renewal Filed (date):	Not applicable
Airport Land Use Referral Area:	Not applicable
Alquist Priolo Special Study Zone:	Not applicable
Primary or Secondary Management Area of the Suisun Marsh:	Not applicable
Primary or Secondary Zone identified in the Delta Protection Act of 1992:	Not applicable

1.2.2 Surrounding General Plan, Zoning and Land Uses

	General Plan	Zoning	Land Use
Property	Rural Residential	RR - 2.5 acre	Residential
North	Rural Residential	RR - 2.5 acre	Residential
South	Rural Residential	RR – 5 acre	Residential
East	Rural Residential	RR – 5 acre	Residential
West	Agriculture	AG - 20	Rural Residential

1.3 CONSISTENCY WITH EXISTING GENERAL PLAN, ZONING, AND OTHER APPLICABLE LAND USE CONTROLS:

1.3.1 General Plan

The property is designated Rural Residential density 1-10 acres per unit, on the General Plan land use diagram. The project proposes 5 acre lots with density of 5 acres per unit, and is consistent with the land use designation and General Plan policies.

1.3.2 Zoning

The property is zoned Rural Residential 2.5 acre minimum (RR 2.5). The five-acre lot size is consistent with minimum zoning requirements.

1.3 Permits and Approvals Required from Other Agencies (Responsible, Trustee and Agencies with Jurisdiction):

Rural North Vacaville Water District
Vacaville Fire Protection District
Solano Local Agency Formation Commission

1.4 Agencies that May Have Jurisdiction over the Project

Unknown

2.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND AVOIDANCE, MINIMIZATION AND/OR PROTECTION MEASURES

This chapter discusses the potential for adverse impacts on the environment. Where the potential for adverse impacts exist, the report discusses the affected environment, the level of potential impact on the affected environment and methods to avoid, minimize or mitigate for potential impacts to the affected environment.

Findings of SIGNIFICANT IMPACT

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the project does not have the potential for significant impacts to any environmental resources.

Findings of LESS THAN SIGNIFICANT IMPACT Due to Mitigation Measures Incorporated Into the Project

Based on the Initial Study, Part I as well as other information reviewed by the Department of Resource Management, the project does not have the potential for impacts that require mitigation measures that reduces impacts to less than significant level to any environmental resources.

- ☐ Noise
- ☐ Biological Resources
- ☐ Hydrology & Water
- ☐ Hazards/Wildfire
- ☐ Cultural Resources

Findings of LESS THAN SIGNIFICANT IMPACT

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered and the potential for impact is considered to be less than significant. A detailed discussion of the potential adverse effects on environmental resources is provided in the Sections below:

- | | |
|---|---|
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Transportation & Traffic | <input type="checkbox"/> Aesthetic |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Population & Housing |
| <input type="checkbox"/> Transportation & Traffic | <input type="checkbox"/> Utilities & Service System |

Findings of NO IMPACT

Based on the Initial Study, Part I as well as the review of the proposed project by the Department of Resource Management, the following environmental resources were considered but no potential for adverse impacts to these resources were identified. A discussion of the no impact finding on environmental resources is provided in the Sections below:

- | | |
|--|---|
| <input type="checkbox"/> Land use planning | <input type="checkbox"/> Agricultural Resources |
| <input type="checkbox"/> Greenhouse gases | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Recreation | |
-

2.1 Aesthetics

Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-c: The site is located along Joslin Lane and Steiger Hill Road, none of which are designated a Scenic Corridor, according to the General Plan. Construction of additional residential development will not degrade the visual character of the area. <i>Less than significant impacts are anticipated.</i>				
d: The additional residences could introduce additional exterior lighting and cause light or glare into the neighborhood. However, County Zoning Code requires the exterior lighting to be oriented from away from adjacent residences. Compliance with the Zoning Code standards will result in <i>less than significant impacts.</i>				
e: The project will not increase the amount of shading on public open space. <i>No impacts are anticipated.</i>				

2.2 Agricultural Resources

Checklist Items: Would the project

	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-c: The property is designated Grazing Land, pursuant to the California Farmland Mapping and Monitoring Program and is not under Williamson Act contract. The property is designated Rural Residential on the General Plan and zoned for Rural Residential development. **No impacts to agricultural practices are anticipated.**

2.3 Air Quality

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a-e: The property is developed with one (1) residential unit and the potential addition of three (3) additional dwellings would not cause a substantial increase in new emissions, additional pollutant concentrations, or objectionable odors and less than significant impacts to air quality are expected.					

2.4 Biological Resources

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Biological Resource Assessment prepared by Moore Biological Consultants was submitted for review. The report covered assessment of potential jurisdictional Waters of the US, vegetation and wildlife habitat. A copy of the report is attached.

The following impacts and mitigation measures are recommended to minimize impacts to a **less than significant level**:

a: Swainson Hawk Foraging Habitat:

The Biological Assessment Report indicates that Swainson's Hawk prefer foraging ground composed of grasslands, irrigated pastures, hay and wheat crops. The grasslands on the subject property are highly disturbed by extensive horse grazing and provide low quality for foraging habitat. Due to the limited value of the disturbed grasslands on the property, the impact of potential loss of foraging habitat is low and less than significant. However, the large trees on site and nearby the subject site are suitable

for nesting raptors and other protected migratory birds. Construction activities could cause disturbance to protected birds and the following mitigation is recommended to minimize impacts to a less than significant level. The measure applies to the subdivider and any individual lot owner seeking construction permits:

Mitigation measure Bio - 1 (Avoidance of avian nests and protected avian species):

- A. If construction activities are scheduled to occur during the breeding season (February 1- August 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential suitable nesting habitat within 0.5 miles of active construction areas, including trees, shrubs, grassland and wetland vegetation. The qualified wildlife biologist shall determine the timing of the preconstruction surveys based upon the time of year and habitats that are present. The qualified wildlife biologist shall conduct surveys no more than 30 days prior to construction.
- B. If active nests are found, maintain a no disturbance buffer zone around the active nests during the breeding season or until it is determined that the young have fledged. The no disturbance buffer zone from active Swainson Hawk nest(s) or any protected avian specie shall be 0.5 miles or as may otherwise be determined by the Planning Services Division, Department of Resource Management, in consultation with a qualified biologist, United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) as appropriate.

c: Potential jurisdictional waters of the US

The report identified the intermittent creek (0.02 acres) located on Lot 1 and two ephemeral creeks (0.06 acres) on Lot 4 and Lot 1 as potentially jurisdictional Waters of the US. No development is proposed that directly impacts the area. Therefore, impacts are considered ***less than significant and mitigation measures are not recommended***.

e: Oak Woodlands and Heritage sized trees:

Significant sized Oak trees are located on the property, specifically on Lot 1 adjacent to the existing residence, clustered by the drainage swale on Lot 4, and along Joslin Lane on Lot 3. The trees and oaks on Lot 1 and Lot 3 appear undisturbed by the proposed project and no mitigation measures are recommended for this area. Lot 2 is devoid of any trees.

General Plan policy RS. P-6 states that the County shall protect Oak Woodlands and Heritage sized Trees and encourage the planting of native tree species in new development and along the road right of way. Heritage sized trees are defined as trees with trunk diameter of 15 inches at breast height (dbh). The cluster of oaks, predominantly Blue Oaks and Interior Live Oaks, identified on Lot 4 range in size between 7" – 75" dbh as shown on the tentative map. Tree removal is not proposed and construction of the future homesite, septic systems, leach field and replacement areas are located outside of the dripline; however, in order to ensure that adverse impacts are avoided, the following mitigation measure is recommended:

Mitigation Measure Bio - 2

- A. Development, construction or trenching within 5 feet of the dripline of the cluster of Oak Trees on Lot, 1, 3 and 4 shall be prohibited and remain undisturbed. The final map shall include a such notation under supplemental notes.
-

Special status plants and wildlife.

According to the report, the presence or impacts to other protected wildlife or plant species are unlikely. **Impacts are anticipated to be less than significant.**

- d, f: The project does not substantially interfere with movement of any native wildlife species and does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plan. **No impacts are anticipated.**

2.5 Cultural Resources

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a-d: A Cultural Resources Technical Memorandum was prepared by Solano Archeological Services for the subject property. The technical memorandum summarizes research, Native American community outreach and pedestrian survey. According to the summary and recommendations, both NAHC and NWIC searches were negative for cultural resources in the project area and no Native American community representatives have expressed interest in or concerns with the proposed project. The memo identified a vernacular outbuilding (SAS-001) dating back to 1960s located on Lot 1, however, due to lack of significant historical characteristics, the report did not recommend SAS-001 not eligible for California Historic Resource Listing. However, in the event that undocumented buried archeological deposits or human remains are uncovered, the following mitigation measure shall apply to **minimize impacts to a less than significant level**:

Mitigation Measure CR – 1:

In the event that presently undocumented buried archeological deposits are encountered during any Project-associated construction activity, work must cease within 50-foot radius of the discovery. A qualified archeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission which will in turn appoint a Most Likely Descendent (MLD) to act as a Tribal Representative. The MLD will work with the subdivider and a qualified archeologist to determine the proper treatment of the human remains and associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via project construction design change.

2.6 Geology and Soils

Checklist Items: Would the project	Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.				
1) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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, differential settlement, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-d: The property is not located within the Alquist-Priolo Earthquake Fault Zone or identified with Liquefaction potential. However, is identified as Generally Susceptible to Land sliding (Figure HS – 8 of the Public Health and Safety Chapter, General Plan) and located on soil that has high-shrink swell potential (Figure HS -10 of the Public Health and Safety Chapter of the General Plan). Parcel specific geotechnical reports prepared by a Geotechnical Engineer licensed in California is required prior to Building Division approval. Compliance will result in **less than significant impacts**.

b. The addition of three (3) new homes would not cause a substantial amount of soil erosion. Compliance with County's Grading standards will result in **less than significant impacts**.

e. The Environmental Health Services Division reviewed the soils report prepared for the subject site by FR Soiltesting and determined that standard septic systems are appropriate for Lot 2 and

engineered septic systems are recommended for Lot 3 and 4. Compliance with County regulations for on-site sewage disposal would minimize impacts to **less than significant**.

2.7 Greenhouse Gas Emissions

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Potential residential development on the subject site would not have a significant impact on greenhouse gas emissions (GhG) as the impact of GhG emissions is considered to be global in nature. **No impacts are anticipated.**
- b. As proposed, the project should not conflict with any goals or policies of the Solano County General Plan, which are intended to reduce or indirectly reduce GhG emissions. Nor would the project conflict with the County's recently adopted Climate Action Plan (June 2011). **No impacts are anticipated.**

2.8 Hazards and Hazardous Materials

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a – g:	No hazardous materials should be released into the environment through transport or accidental upset of hazardous materials as a result of this proposal. The project site is not listed on a list of hazardous materials sites, nor located within an airport land use plan. The project will not impair the implementation of an adopted emergency response plan or emergency evacuation plan. Impacts are less than significant.				
h.	The project site is located within the Cal Fire State Responsibility Area and has the potential to expose people or structures to significant loss during a wildfire. Cal Fire adopted regulations addressing various aspects of development such as defensible space, road widths and driveway access standards which could mitigate the risk of exposure and loss, injury and death. The proposed tentative map identifies				

required 30-foot setback required for defensible space and complies with the Vacaville Fire Protection District rule regarding siting homesites no farther than 1000 foot from an existing fire hydrant. Compliance with driveway access standards will be verified during the residential construction phase. However, in order to inform future buyers of the potential risks, the following mitigation measure is recommended in order to **minimize impacts to a less than significant level**.

- Haz – 1** On the final parcel map, delineate the 30-foot setback(defensible space) from the property lines as shown on the tentative map, required by Cal Fire Regulations and include a note that the property is located within the State Responsibility Area for wildfire. Compliance with the Cal Fire adopted regulations (Cal Code reg. Title 14 Sec 1270 et seq) could minimize the risk of loss, injury or death involving wildfire.

2.9 Hydrology and Water

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h.	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j.	Be subject to inundation by seiche, tsunamis, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b:	The entire property is designated as an "A" zone for water bearing rocks in the San Francisco Bay Area by D.A. Webster 1972 - US Department of Interior of Geological Survey. The "A"				

water zone has the lowest probability of success when attempting to develop a domestic drinking water well with a minimum sustained yield of 3 gallons per minute, when compared to water bearing rock zones with higher probability such as “B, C and D”.

The Subdivision Ordinance allows well water to serve as the water supply for lots 5 acres or more; however, the low probability of success raises the risk of water availability and concern for domestic use feasibility for project approval. The applicant has proposed public water service connections by the Rural North Vacaville Water District for four (4) lots. The public water main is located in Steiger Hill Road and new water meter connections are required.

Public water service connection will ensure adequate water supply for the project in a groundwater scarce area. The Rural North Vacaville Water District has approved the sale of four (4) water rights (Resolution 2020-44) and requires annexation approval by the Solano Local Agency Formation Commission. The District requires that all improvements shall be designed, engineered and installed by the subdivider in accordance with the District Rules and Regulations prior to recording the final map or sale of individual lots.

Individual well water usage for three (3) additional lots in a groundwater scarce area has the potential to cause a significant impact; therefore, the following mitigation measure is recommended to minimize impacts to a **less than significant level**:

Mitigation measure WS-1:

- A. Prior to the recordation of the Parcel Map, complete all engineering and construction related to the public water system, according to the terms of agreement with the Rural North Vacaville Water District, in compliance with the rules and regulations of the Rural North Vacaville District. Submit evidence to the Department of Resource Management that the engineering plans and necessary infrastructure installation are complete to the satisfaction of the Rural North Vacaville Water District.
 - c-f: Site development and grading activities will be required to implement Best Management Practices (BMP's) to address construction related surface runoff and vehicle and construction equipment clean out areas. With an approved grading/drainage and erosion control plan utilizing the latest BMP technologies and compliance with the recommended riparian corridor mitigation measures, impacts to on-site and off-site water quality should be reduced to a less than significant level. **Less than significant impacts are anticipated.**
 - g,h: According to FEMA flood maps, the project site is not located within the Federal Emergency Management Agency's (FEMA) Flood Zone A (100-year flood zone). The site lies within FEMA Flood Zone X according to Firm Panels 06095C 0161F and C0695C 0150E. Zone X is defined as an area of minimal flood hazard. Therefore, there would be **no impact** and no further discussion is required.
 - i, j: The project site is inland and is not threatened by potential seiche or tsunamis. Therefore, **no impact** would occur and no further discussion on this issue is required.
-

2.10 Land Use and Planning

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-c: The project will not physically divide any community. The project site is located within the Rural Residential land use designation and zoned for rural residential development. The proposed subdivision is consistent with the General Plan. Annexation into the Rural North Vacaville Water District will ensure, adequate provision of public water service. There is no conservation plan in the project vicinity; therefore, no impacts are anticipated.					

2.11 Mineral Resources

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a, b. The site is not designated with mineral resource importance according to the General Plan or other land use plan. No impacts are anticipated.					

2.12 Noise

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-d: Due to the location within the valley, the project could add ambient noise levels during construction and post construction. Complaints from the community have been received regarding noise levels during residential construction. The addition of additional residences could potentially raise the temporary ambient noise levels in the neighborhood. In order to mitigate for construction level noise, the following mitigation measure is recommended to minimize impacts to ***less than significant***

Mitigation measure Noise – 1:

Construction activity is limited to weekdays during the hours of 8 a.m. to 5 p.m., Monday through Friday; and 9 a.m. to 4 p.m. on Saturdays, and no work should occur on Sundays and Federal holidays. In order to ensure future buyers are aware of the noise restrictions, the final map shall include a supplemental note statement regarding the noise restriction for construction activities.

However, residential activities are considered normal and would not typically exceed the 65 dB noise standard for residential neighborhood. Noise nuisances would be subject to enforcement actions.

e, f. The project is not located within the vicinity of an airport or private airstrip. ***No impacts*** are anticipated.

2.13 Population and Housing

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a.	The proposed project would allow three (3) additional single-family dwellings. Given that the average household size in the unincorporated County is 2.88 persons per household (2010 Census Data), the average number of additional persons expected to reside at the project site is 9 persons. This increase alone would create a less than significant impact .				
b,c	This area is planned for this density of residential growth with the necessary infrastructure and public services to support the project available. The project does not involve the displacement of homes or people, and will have no impact .				

2.14 Public Services

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1)	Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2)	Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3)	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4)	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5)	Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- 1) The project will not cause adverse impacts; however, compliance with Vacaville Fire Protection District Rules and Regulations and Cal Fire State Responsibility Area regulations as recommended in the Hazards Section of this Initial Study, could minimize impacts to **less than significant level**.
- 2) The project proposes three (3) additional homesites, in an existing service area of the Sheriff's Department and the relatively small number of new parcels being created would not typically require additional staffing resources by the Sheriff. **Less than significant impacts are anticipated.**
- 3) Individual property owners will pay fees prior to issuance of building permits which will help pay for new schools or additional facilities, in the Vacaville Unified School District. **Less than significant impacts are anticipated.**
- 4) The project is not anticipated to generate the need or impact for additional recreational facilities. **Less than significant impacts are anticipated.**
- 5) The project will utilize public water service by the Rural North Vacaville Water District. The project proponent will be required to install public water meters and infrastructure lines within public right-of-way, prior to Final Map recordation or sale of each individual lot. Each individual lot owner will be responsible for installation to the home. Installation of the infrastructure will be subject to the rules and regulations of the Rural North Vacaville Water District. **Less than significant impacts are anticipated.**

2.15 Recreation

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-c: The additional households could utilize existing neighborhood or regional parks in the vicinity of the project. The potential small increase in park use would not cause substantial physical deterioration and, therefore, the project will have **no impact** on recreational facilities.

2.16 Transportation and Traffic

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-f: Steiger Hill and Joslin Lane are currently built to County Road Improvement Standards. The project is anticipated to generate additional 28.8 ADT based upon a 9.6 trip generation rate for a single-family residence according to the Institute of Transportation Engineers Trip Generation manual. The increase in traffic would not have significant impacts on the existing traffic load and capacity of the street system and impacts are considered ***less than significant***.

California Office of Planning and Research guidelines for Vehicle Mile Traveled (VMT) analysis state that projects that generate fewer than 110 trips per day may be assumed to cause less than significant impacts. The project generates approximately 28.8 ADT; therefore, **impacts are less than significant**.

The proposed project will not conflict with any circulation plan, result in inadequate emergency access or impact any farm equipment. Traffic impacts are ***less than significant***.

2.16 Utilities and Service Systems

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-b,f,g: No wastewater treatment plants will be used as all four parcels will utilize septic systems. The existing land fill has the capacity to handle all waste from the additional parcels. No impacts are anticipated.					
c.	Compliance with County Code Chapter 31, Grading, Drainage, Land Leveling and Erosion Control prior to issuance of building permits for the new residences will ensure less than significant impacts .				
d.	As discussed in the Hydrology & Water Section, the property is in the groundwater scarce zone, "A" water zone and the project proposes to provide public water service for the proposed development and existing residence. Compliance with recommended mitigation measure WS-1 could mitigate impacts to less than significant .				
e.	The applicant submitted a Soils Report prepared by FR Soiltesting, for the subject site. The Environmental Health Services Division reviewed the report and concluded that septic systems are permissible on the property. Compliance with County Code Section 6.4 shall ensure that impacts are less than significant .				

2.17 Mandatory Findings of Significance

Checklist Items: Would the project		Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a.	Does the project have the potential to (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a-c: The General Plan has designated this area for rural residential purposes and impacts associated residential activities, are to be expected and anticipated. Implementation of recommended mitigation measures could reduce environmental effects and impacts to the environment and humans to less than significant level. Therefore, impacts could be mitigated to less than significant level .					

3.0 Agency Coordination and Public Involvement

3.1 Consultation and Coordination with Public Agencies

The Initial Study is being circulated for public comment for 30-day period. Public Comment period deadline is June 4, 2021. See below or page 4 for contact information.

3.2 Public Participation Methods

The Initial Study is available at the Solano County Department of Resource Management and online at the Department's Planning Services Division website at:

<http://www.solanocounty.com/depts/rm/documents/eir/default.asp>

Interested parties may contact the planner assigned to this project at the contact points provided below:

Nedzlene Ferrario
Planning Services Division
Resource Management Department
675 Texas Street, Suite 5500
Fairfield, CA 94533

PHONE: (707) 784-6765
EMAIL: nferrario@solanocounty.com

4.0 List of Preparers

This Initial Study was prepared by the Solano County Department of Resource Management. The following staff and consultants contributed to the preparation of this Initial Study:

Solano County Department of Resource Management
Nedzlene Ferrario

5.0 Distribution List

Rural North Vacaville Water District
Vacaville Fire Protection District
Solano Local Agency Formation Commission

6.0 Appendices

- 6.1 Application Forms MS - 20-02**
 - 6.2 Assessor's Parcel Map**
 - 6.3 Tentative Parcel Map**
 - 6.4 Biological Assessment Report**
 - 6.5 Cultural Resource Technical Memorandum**
 - 6.7 Rural North Vacaville Water District Letter**
 - 6.8 Solano Local Agency Formation Commission**
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DEPARTMENT OF RESOURCE MANAGEMENT

DEVELOPMENT PERMIT APPLICATION

Planning Services Division

675 Texas Street , Suite 5500, Fairfield, CA 94533
Phone (707) 784-6765 Fax (707) 784-4805
www.solanocounty.com

Application Type: ☐ New ☐ Extension (maps) ☐ Minor Revision ☐ Map Modification

<input type="checkbox"/> Architectural Review (AR)	<input checked="" type="checkbox"/> Minor Subdivision (MS)	<input type="checkbox"/> Sign Permit (SGN)
<input type="checkbox"/> General Plan Amendment (G)	<input type="checkbox"/> Major Subdivision (S)	<input type="checkbox"/> Use Permit (U)
<input type="checkbox"/> Mutual Agreement (MA)	<input type="checkbox"/> Performance Standards (PS)	<input type="checkbox"/> Variance (V)
<input type="checkbox"/> Marsh Development Permit (MD)	<input type="checkbox"/> Policy Plan Overlay (PP)	<input type="checkbox"/> Waiver (WA)
<input type="checkbox"/> Mobilehome Storage Permit (MH)	<input type="checkbox"/> Rezone (Z)	

For office use only: Application No: _____ Hrg: ZA PC BOS _____ Date Filed: _____ Plnr: _____

Project Name: Steiger Lands

Subject Site Information

Site Address: 7061 Steiger Hill Rd City: Vacaville State: CA Zip: 95688

Assessor's Parcel Number (s): 0105-190-090 Size (sq. ft/acre): 22.974

Preferred Property Access by Staff: ☐ OK to access ☒ Call applicant before access ☐ Call owner before access

Contact Information

Property Owner Name: NORCAL PROPERTIES MANAGEMENT LLC

Contact Name: Marco Delcampo Phone: (707) 320-1394 Email: Office@procretebuilders.com

Mailing Address: 102 Vine St City: Vacaville State: CA Zip: 95688

Architect/Engineer/Land Surveyor Company Name: RFE Engineering, Inc.

Contact Name: Steve Killmer, PLS Phone: 916-772-7800 Email: skillmer@rfeengineering.com

Mailing Address: 2260 Douglas Boulevard, Suite 160 City: Roseville State: CA Zip: 95661

Applicant/Company Name: Tony Alcala

Contact Name : Tony Alcala Phone: (707) 724-9733 Email: tonyalcala@outlook.com

Mailing Address: 102 Vine St City: Vacaville State: CA Zip: 95688

Other Contacts:

Name: _____ Phone: _____ Email: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

1 Project Narrative

Describe the type of development, proposed uses/business, phases, changes or alterations to the property or building and intent or purpose of your proposal clearly. Attach additional sheets as necessary.

The project consists of subdividing 22.97- acre parcel into four lots.

Each of the four proposed lots with above 5.1 acres (net) calculated within the boundaries of the 22.97 net acres.

Lots will consist for Lot # 1 = 6.31 Acres, Lot # 2 = 5.15 Acres, Lot # 3 = 5.87 Acres, and for Lot # 4 = 5.55 Acres.

Two of the proposed lots will have driveway with road access to Steiger Hill Road and two proposed lots located at the north end will have road access to Joslin Lane.

The proposed property lines would bisect the 22.97-acre parcel running east-west. Proposed configuration will situate the existing residential structure with water well pump house and septic system on the proposed the 6.31 Acre Lot # 1

All four proposed lots will be for Residential development as part of this subdivision.

Lot # 4 being proposed to utilize the existing well located at the Southeast corner of the site. Lots 2 and 3 are

proposed to obtain a water connection from the currently available connections of RNVWD. All Lots will required private septic systems and PG&E power.

Please note: Each proposed parcel is above 5.1 acres (gross) and exceed the 2.5-acre minimum parcel size required by zoning.

Each proposed lot maintains the minimum 5-acre parcel size required for lots which utilize private water wells and individual private sewage disposal systems. Both the existing land use and proposed lot sizes are aimed to be consistent with applicable General Plan designations and zoning district.

2 General Plan, Zoning and Utilities:

General Plan, Zoning or Williamson Act Contract information is available at our offices or can be obtained by visiting www.solanocounty.com. Click on the "Interactive Map" icon, then search by address or assessor parcel number.

Current General Plan Designation: Rural Residential

Current Zoning: RR-2.5

Proposed General Plan Designation: Rural Residential

Proposed Zoning: RR-2.5

Current Water Provider: On Site Well

Current Sewage Disposal: Septic system

Proposed Water Provider: On Site Well for Lots 1&4 RNVWD for 2&3

Proposed Sewage Disposal: Septic system

3 Williamson Act Contract

- A. Is any portion of the property under Williamson Act Contract? ☐ Yes ☒ No

If yes, Contract No. _____ please provide a copy.

- If yes, has a Notice of Non-Renewal been filed? ☐ Yes ☒ No

If yes, please provide a copy.

- B. Are there any agricultural conservation, open space or similar easements affecting the use of the project site?
(such easements do not include Williamson Act contracts)

☐ Yes ☒ No *if yes, please list and provide a copy.*

4 Additional Background Information

- A. Does the proposal propose the demolition or alteration of any existing structures on the subject site?

☐ Yes ☒ No *If yes, please describe in the project narrative.*

- B. List any permits that are required from Solano County and/or other local, state, federal agencies (i.e. building permit, Department of Fish and Game permits, etc.)

- C. List any known previously approved projects located on the property (i.e. Use Permit, Parcel Maps, etc). Identify the project name, type of project and date of approval.

Home and Carport remodel - permit number B-2018-0878 & B2018-0879 - Approved 12/13/19

- D. List any known professionally prepared reports for the project (i.e. biological survey, traffic study, geologic, hazardous materials, etc.)

- E. Does the project involve Housing and Urban Development (HUD) federal funding? ☐ Yes ☒ No
Is HUD funding anticipated? ☐ Yes ☒ No

If yes, indicate the type of funding (i.e. CDBG grant, HOME, Investment Partnership Program, etc), funding amount, whether awarded or application pending and fiscal year of award or application request.

H. Is this part of a larger project? If yes, please explain. ☐ Yes ☒ No

5 Existing Conditions

Describe in general the project site and surrounding properties as they presently exist; including but not limited to, information on existing land uses, unique physical and topographic features, soil stability, plants and animals, cultural, historical, or scenic aspects, and any other information which would assist the Department in understanding the project's environmental setting. Clear, representative color photographs may be submitted to show the project area. Draw in property boundaries on the photographs.

A. Project site:

The property has a hill side setting at the west side of the property with relative gentle slopes less than 6 Percent at it meets Steiger Hill road and as it meets Joslin Lane on the north side of the property.

B. Surrounding properties:

Rural residential lots generally ranging between 2.5 - 20 acres surround the project site. Nearly all of the lots in the vicinity of the subject site have been developed with residences and residential accessory structures.

C. Existing use of land:

The parcel is developed with one residential structure and associated private septic systems and domestic water wells.

D. Describe number and type of existing structures:

	Type/Number	Square Feet
Residential	Residence/1	1490
Agricultural		
Commercial		
Industrial		
Other		

E. Describe existing vegetation on site, including number and type of existing trees.

Aside from a few trees surrounding the home site and at north end. The property is generally void of vegetation and covered in grasses.

F. If in agricultural use, describe type of use or crop (cattle, sheep, hay, vegetables, fruit, etc).

N/A

G. Slope of property:

Flat or sloping	(0 - 6% slope)	<u>10.1</u>	acres
Rolling	(7 - 15% slope)	<u>7.4</u>	acres
Hilly	(16 - 24% slope)	<u>5.4</u>	acres
Steep	(> 24% slope)	_____	acres

H. Describe existing drainage conditions on site. Indicate direction of surface flows, adjacent parcels affected.

There exist Storm water runoff drains at the north and south sides of property. Surface flows are in the direction towards Steiger Hill and Joslin Lane

I. Describe land uses on adjacent parcels (specify types of crops if agricultural).

North	Residential	South	Residential
East	Residential	West	Residential

J. Distance to nearest residence(s) or other adjacent use(s): 100 Feet (ft/mi)

K. Describe and indicate location of any power lines, water mains, pipelines or other transmission lines which are located on or adjacent to the property.

Electrical pole and Phone lines run adjacent to the property along Steiger Hill and Joslin Lane.

A 12" water line for the RNVWD runs along the side of Steiger Hill Rd

L. Describe number and location of natural creeks or water courses through or adjacent to the property. Specify names (if any). Indicate whether ephemeral (brief flows following rains), intermittent (seasonal flows during wet season), or perennial (year-round flows).

There are two intermittent drains located ends of the property, one located at the north end and flows north. The drain is located at the south end and it drains east.

M. Describe number and location of man-made drainage channels through or adjacent to the property. Specify names, if any.

There is a water channel adjacent to property line and Steiger Hill Rd running downhill heading north,

N. Identify and describe any on-site or adjacent marshes, wetlands, vernal pools, wet meadows, riparian (i.e. dependant on water bodies) vegetation, etc.:

N/A

O. Are there any unique, sensitive, rare, threatened, or endangered animals, plants, or habitats on the project site or located in close proximity which may be affected by the project?

Yes _____ No X Don't Know _____ If yes, please list:

P. Describe existing vehicle access(s) to property:

Vehicle access in to property from Steiger Hill rd and Joslin Lane

- Q. List and describe the nature and location of all existing easements serving or affecting the property, including access, utility, and other public or private easements (see deed or recent preliminary title report).

N/A

- R. List and describe any freestanding and attached signage on the property. Describe the dimensions, area and height. Include the location on the site plan.

N/A

6 Proposed Changes to the Site

- A. Topography and grading (attach copy of grading plan showing existing and proposed topography and drainage patterns.)

i. Percent of site previously graded: N/A %.

ii. Project area (area to be graded or otherwise disturbed): _____ sq. ft./acres.

iii. Estimate amount of soil to be moved (cut and/or fill):

_____ Less than 50 cubic yds³ _____ More than 50 cubic yds³ x More than 1000 cubic yds³

iv. Estimate amount of soil to be: N/A

Imported _____ yd³ Exported _____ yd³ Used on site _____ yd³.

- B. Number, size and type of trees, and type and quantity of vegetation to be removed. (size of trees = diameter at 4ft. above grade)

N/A

- C. Number, type and use of existing structures to be removed, and removal schedule: N/A

- D. Describe proposed fencing and/or visual screening (landscaping):

Proposing a similar to existing barb wire for the
separation and property lines

- E. Proposed access to project site (road name, driveway location, etc.):

Lots # 2 and # 3 being proposed with a driveway into Steiger Hill Rd . Lot # 4 with a driveway into Joslin Lane.
Lot # 1 will maintain is current road access to Steiger Hill Road.

- F. Proposed source and method of water supply:

Lots #1 and #4 have on site wells. Proposed lots #2 and #3 will receive water service from RNVWD

- G. Proposed method of sewage disposal (specify agency if public sewer):

On - site Septic System

H. Provisions for solid/hazardous waste disposal (specify company or agency if applicable):

N/A

I. List hazardous materials or wastes handled on-site:

N/A

J. Duration of construction and/or anticipated phasing:

K. Will the proposed use be affected by or sensitive to existing noise in the vicinity? If so, describe source (e.g. freeway, industrial) and distance to noise source. No

7 Proposed Site Utilization

A. RESIDENTIAL PROJECTS

1. Number of structures: Single Family: X Multi-family: _____ Accessory: X

If multi-family, number of units: _____ Maximum height: _____

2. Signage: Freestanding: _____ Dimension(s): _____ Area: _____ (sq.ft)

Attached/Wall _____ Dimensions(s): _____ Area: _____ (sq.ft)

B. NON-RESIDENTIAL PROJECTS (Commercial, Industrial, Agricultural, Other) N/A

1. Lot coverage:

Building coverage: _____ (sq.ft.) Surfaced area: _____ (sq.ft.)

Landscaped or open space: _____ (sq.ft.)

2. Total floor area: _____ (sq.ft.)

3. Number of stories: _____ Maximum height: _____ (ft.)

4. Proposed hours of operation:

Days: _____

From : _____ a.m./p.m to _____ a.m./p.m

Year round: ☐ Yes ☐ No

Months of operation: from _____ through _____

5. Proposed construction schedule:

Daily construction schedule: from _____ a.m./p.m. to _____ a.m./p.m.

Days of construction: _____

6. Will this project be constructed in phases? Describe: No

7. Maximum number of people using facilities: N/A

At any one time: _____ Throughout day: _____

8. Total number of employees: _____

Expected maximum number of employees on site: _____

During a shift: _____ During day: _____

9. Number of parking spaces proposed: _____

10. Maximum number of vehicles expected to arrive at site:

At any one time: _____ day: _____

11. Radius of service area: _____

12. Type of loading/unloading facilities: N/A

13. Type of exterior lighting proposed: N/A

14. Describe all anticipated noise-generating operations, vehicles or equipment on-site.

None

15. Describe all proposed uses which may emit odors detectable on or off-site.

None

16. Describe all proposed freestanding and wall signage. Include the dimensions, area and height.

None

8 Environmental Checklist

Indicate the following items applicable to the project or its effects. Discuss in Section 9 all items checked "Yes" or "Maybe". **Attach additional sheets as necessary.**

	YES	MAYBE	NO
A. Change in existing natural features including any bays, tidelands, lakes, streams, beaches, natural landforms or vegetation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. Change in scenic views or vistas from existing residential areas, public lands or roads.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C. Change in scale, pattern or character of general area of project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D. Increased amounts of solid waste or litter.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E. Dust, ash, smoke, fumes or odors on site or in vicinity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
F. Change in ground water quality or quantity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
G. Alteration of existing drainage patterns, or change in surface water quantity or quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
H. Change in existing noise or vibration levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I. Construction on filled land or construction or grading on slopes of 25% or more.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
J. Storage, use or disposal of materials potentially hazardous to man or wildlife, including gasoline and diesel fuel. (See Environmental Health Division for assistance or information).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
K. Increase in demand for public services (police, fire, water, sewer, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L. Increase in fossil fuel consumption (electricity, natural gas, oil, etc.).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
M. Change in use of or access to an existing recreational area or navigable stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
N. Change in traffic or vehicular noise on road system in immediate vicinity.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
O. Increased hazards for vehicles, bicycles or pedestrians.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P. Removal of agricultural or grazing lands from production.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Q. Relocation of people.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

9 Additional Information by Applicant


In order to make this application COMPLETE, please submit any additional data, information or special study reports that may be necessary to determine whether the project may have significant effect on the environment or to evaluate any adverse impacts, and to determine how they may be mitigated. Add additional pages as necessary.

10 Information Verification - Signed by Owner and Applicant

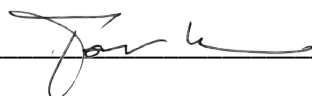
Owner and Applicant must sign below certifying that all information is to the best of his/her knowledge true and correct.

If the applicant is not the owner of record of all property included in this application, the signature given below is certification that the owners of record have knowledge of and consent to the filing of this application and supporting information. Additionally, the undersigned does hereby authorize representatives of the County to enter upon the above mentioned property for inspection purposes and as necessary to evaluate potential environmental impacts of the project. **This certification acknowledges that if the project exceeds double that of the application fee, applicants are subject to the hourly billing rate of staff time. You will be notified if the project is approaching this threshold.**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Owner signature:  Date: 5/19/20

PRINTED NAME: Nor- Cal Management Properties LLC

Applicant signature:  Date: 5/19/20

PRINTED NAME: Tony Alcala

For Office Use Only

Planning Permit Fee(s)

_____-_____-_____\$ _____
_____-_____-_____\$ _____
_____-_____-_____\$ _____
_____-_____-_____\$ _____
_____-_____-_____\$ _____

Total \$ _____

Total Fees Paid (P + E) \$ _____

Environmental Review Fees

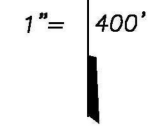
Initial Study \$ _____
Archaeological Study (Sonoma State NWIC) \$ _____
Negative Declaration \$ _____
CA Fish and Games (ND or EIR) \$ _____
Initiate EIR \$ _____
Mitigation Monitoring Plan \$ _____
Total \$ _____

Receipt No.: _____

Staff verify: Zoning: _____ GP Land Use & Consistency: _____

Comments: _____ Staff/Date: _____

105-19



1	N. 41° 57' 17" W	166.32
2	S. 85° 47' 45" W	208.66
3	N. 66° 48' 17" W	130.68
4	S. 28° 31' 43" W	356.40
5	S. 19° 17' 43" W	196.07
6	N. 63° 57' 17" W	182.15
7	S. 85° 17' 43" W	248.86
8	N. 6° 12' 17" W	186.77
9	N. 21° 17' 17" W	431.31
10	N. 21° 17' 17" W	250.57
11	S. 26° 46' 17" W	36.17
12	S. 69° 42' 17" W	221.97
13	S. 35° 12' 17" W	82.67
14	S. 11° 12' 23" W	66.89
15	S. 69° 46' 18" W	132.87
<hr/>		
16	S. 28° 42' 44" W	42.40
17	S. 5° 30' 07" W	71.67
18	S. 70° 00' 36" W	111.66
19	S. 11° 53' 33" W	73.95
20	S. 47° 43' 34" W	176.00
21	S. 59° 26' 10" W	61.49
22	N. 18° 27' 01" W	47.06
23	N. 54° 24' 36" W	72.91
24	N. 20° 17' 58" W	164.13
25	N. 47° 04' 17" W	100.57
26	N. 32° 20' 20" W	104.39
27	N. 19° 49' 49" W	169.82
28	N. 0° 22' 57" W	110.94
29	S. 45° 15' 08" E	196.43
30	S. 60° 11' 38" E	273.06

Map Corr.	10-06-08	DV
Add St. (RM)	11-10-05	JS
S.B.E. 04-004	9-11-03	SE
Por.to Pg.24 (R.M.)	5-20-03	JS
REVISION	DATE	BY

NOTE: This map is for assessment purposes only. It is not intended to define legal boundary rights or imply compliance with land division laws.

Assessor's Block Numbers Shown in Ellipses, Assessor's Parcel Numbers Shown in Circles

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CULTURAL RESOURCES TECHNICAL MEMORANDUM

Date: September 5, 2020

To: Nor-Cal Properties Management, LLC

From: Solano Archaeological Services LLC

Subject: Cultural Resources Study - 7061 Steiger Hill Road Subdivision Project, Solano County, California

INTRODUCTION

This technical memorandum summarizes the background research, Native American community outreach, pedestrian survey, and findings for the 7061 Steiger Hill Road Subdivision Project (Project). The Project is subject to California Environmental Quality Act (CEQA) requirements, and Solano Archaeological Services (SAS) has prepared this technical memorandum to support those needs.

PROJECT LOCATION

The project area consists of an approximately 22.97-acre (ac.) parcel (APN 0105-190-090) located north of the City of Vacaville in Solano County, California (Attachment A, Figures 1–3). Situated in the Rural North Vacaville Sphere of Influence, the project area lies at southwest intersection of Steiger Hill Road, and Joslin Lane about 4 miles (mi.) north of Interstate 80, and 3.5 mi. west of Interstate 505. The project area is situated in the Los Puntos land grant on the U.S. Geological Survey (USGS) *Mount Vaca, California*, 7.5-minute quadrangle map, in Township 7 North, Range 1 West, Section 31 (projected).

PROJECT DESCRIPTION

Nor-Cal Properties Management, LLC proposes to subdivide the existing 22.97-ac. parcel (the project area) into four lots consistent with Solano County's Rural Residential designation. The lots would range in size from the largest at 6.31 ac. to the smallest at 5.5 ac. The purpose of the subdivision would be to provide for the construction of four residential complexes each including a house and accompany utility infrastructure.

REGULATORY SETTING

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of the projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a "historical resource"), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

CEQA §5024.1 (Public Resources Code §5024.1) and §15064.5 of the State CEQA Guidelines (14 California Code of Regulations [CCR] §15064.5) define a historical resource as "a resource listed or

eligible for listing on the California Register of Historical Resources.” A historical resource may be eligible for inclusion in the California Register of Historical Resources (CRHR) if it:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- 2) Is associated with the lives of persons important to our past;
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values; or
- 4) Has yielded, or may be likely to yield, information important to prehistory or history.

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and “unique archaeological resources.” An archaeological resource is considered “unique” if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory;
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (Public Resources Code §21083.2).

According to the CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR §15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The CEQA Guidelines (14 CCR §15064.5[e]) also require that excavation activities be stopped whenever human remains are uncovered, and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of a Native American, the Native American Heritage Commission must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in CCR §15064.5 must be followed.

NATURAL AND CULTURAL SETTING

Existing Environment

The landscape and natural resources surrounding the site are rich and diverse. These conditions are also reflected in the larger Solano region through numerous geological, ecological, and biological resource zones. Thus, the climate and natural environment would have provided an excellent setting for prehistoric settlement and subsistence. The modern climate of the Solano area is mild most of the year with an annual average temperature of 60.3°F. Cool temperatures average between 47–51°F during the winter months (December through February) and average hot temperatures range between 84.9–89.0°F during the summer months (June through August). The annual average amount of precipitation is 27.6 inches, most falling during the winter months. The summer months average 0.05 inches of precipitation between June and August.

Although numerous local season and perennial water sources can be found near the project area (e.g. English Creek to north and South Fork English Creek just to the west), the largest waterway in the area is Ulatis Creek about a mile to the west. Ulatis Creek exhibits a significant riparian habitat supporting numerous terrestrial and aquatic species on either a seasonal or a year-round basis (Brown 1999; Lightfoot and Parrish 2009). Terrestrial mammals in particular would also have provided dietary protein and fat as well as necessary raw materials for a wide variety of implements (Anderson 2005; Lightfoot and Parrish 2009; Storer and Tevis 1996).

The prehistoric inhabitants of the region would also have had access to the coastal marsh and bay environments south of the project area at Grizzly Bay, Suisun Marsh, Suisun Bay, Honker Bay, and San Pablo Bay. These fresh water and brackish marsh environments are host to hundreds of plant and animal species (e.g. migratory waterfowl, fish, and marine mammals) that could not be otherwise obtained from the riparian habitats closest to the site, but would have provided additional resources for shelter, subsistence, and personal adornment fully within the ethnographic territory of the Patwin (see *Ethnographic Setting* below) (Eschmeyer and Herald 1983; Lightfoot and Parrish 2009).

PREHISTORIC CONTEXT

David Fredrickson's study of the central districts of the North Coast Ranges in the early 1970s led him to build a sequence of cultural patterns that could be placed within a framework of distinct cultural periods. These periods, he proposed, were applicable to California as a whole. The cultural patterns developed by Fredrickson were distinctively different from the concepts of previous researchers (Beardsley 1954) who tended to emphasize assemblages of material goods as the basis for their classifications. Fredrickson, taking a much broader view of recovered archaeological materials, defined the term *pattern* as "...an adaptive mode shared in general outline by a number of analytically separable cultures over an appreciable period of time within an appreciable geographic space." (Fredrickson 1973).

Fredrickson recognized that the economic/cultural component of each pattern could be manifested in neighboring geographic regions according to the presence of stylistically different artifact assemblages. He introduced the term *Aspect* as a cultural subset of the pattern, defining it as a set of historically related technological and stylistic cultural assemblages. The following is a summary of these temporal periods, now known as the *Archaic-Emergent* structure. This nomenclature is widely used by North Bay archaeologists and some Central Bay archaeologists. The listed temporal periods below describe the associated cultural patterns that have been identified for northern Solano County and the adjoining regions and incorporates recent taxonomic and interpretative revisions that are summarized from the work of White and Frederickson (1992).

Paleo-Indian Period (10,000 BC to 6000 BC)

This period saw the first demonstrated entry and spread of humans into California with most known sites being situated along lakeshores. A developed milling tool technology may be present at this time depth although evidence regarding this technology is scarce. The social units were not heavily dependent upon the exchange of resources with trading activities having occurred on an ad-hoc, individual basis.

The Post Pattern represents the earliest known occupation of the North Coast Ranges. This Pattern is documented only at the Borax Lake site, and perhaps at the Mostin site (Moratto, 1984:497). Characteristic artifacts noted in the lithic assemblages include fluted projectile points and flaked crescents. Though the artifacts representative of this Pattern have never been found in a single site context in the Solano County region, numerous occurrences of its distinctive artifacts are reported and can be affiliated with better-documented assemblages in California and throughout North America.

Lower Archaic Period (6000 BC to 3000 BC)

The beginning of this period coincides with that of the middle Holocene climatic shift to more arid conditions that brought about the drying up of the pluvial lakes. Subsistence appears to have been focused more on plant foods although hunting clearly still provided for important food and raw material sources. Settlement was semi-sedentary with little emphasis on material wealth. Most tools were manufactured of local materials, and exchange remained on an ad hoc basis. Distinctive artifact types are large projectile points and the milling slab and hand stone. The Lower Archaic Borax Lake Pattern has been identified in the North Coast Ranges during this period.

Middle Archaic Period (3000 BC to 1000 BC)

This period begins at the end of mid-Holocene climatic conditions when weather patterns became similar to present-day conditions. Discernable cultural change was likely brought about in response to these changes in climate and accompanying variation in available floral and faunal resources. Economic systems were more diversified and likely included the introduction of acorn processing technology. Hunting remained an important source of food and raw materials although reliance on plant foods appears to have predominated the subsistence system. Sedentism appears to have been fully developed and there was an overall growth in population and a general expansion in land use.

Upper Archaic Period (1000 BC to AD 500)

A marked expansion of sociopolitical complexity marks this period with the development of status distinctions based upon material wealth being well documented. Group-oriented religions emerge and may be the origins of the Kuksu religious system that arises at the end of the period. There was a greater complexity of trade systems with evidence for regular, sustained exchanges between groups. Shell beads gained in significance as possible indicators of personal status and as important trade items. This period retained the large projectile points in different forms, but the milling slab and hand stone were replaced throughout most of California by the bowl mortar and pestle.

Emergent Period (AD 500 to 1800)

This period is distinguished by the advent of several technological and social changes. The bow and arrow were introduced, ultimately replacing the atlatl. Territorial boundaries between groups became well established and were well documented in early historic accounts. It became increasingly common for distinctions in an individual's social status to have been linked to acquired wealth. The exchange of goods between groups became more regularized with more raw materials, along with finished products, entering into the exchange networks. In the latter portion of this period (1500 AD to 1800 AD), exchange relations became highly regularized and sophisticated. The clam disk bead became a monetary unit of exchange and increasing quantities of goods are transported over greater distances. Specialists arose to govern various aspects of production and exchange.

ETHNOGRAPHIC SETTING

The project area is situated in the ethnographic territory of the Patwin. The Patwin, which means "people" in their own language, are also known as the *Copeh* or Southern Wintun. At the time of initial contact with European explorers, they existed mainly in what are now known as Solano, Yolo, and Colusa counties, and shared territorial boundaries with many different Native American groups. The Nomlaki to the north referred to the Patwin as *noymok*, or "south people", while the Yuki to the northwest referred to them as the "Little Stony Creek Patwin" who had contact with *Ku'mnom*, or "salt people" (Johnson 1978: 358-359).

The Patwin territory took an approximate geographic expanse of 90 mi. north-south by 40 m.s east-west. They were known to have existed on the east side of the Coastal Range, along the foothills east of Clear Lake. Suisun Bay acted as their southern boundary, providing a Delta tule marsh habitat full of biota to exploit. From Suisun Bay to the confluence of Feather River and the lower Sacramento River, the Patwin eastern boundary existed near the west banks of the Sacramento River (Johnson 1978:350-351).

The Patwin belong to the Penutian linguistic stock, which has been divided into five languages. The Wintun language group, residing on the west side of the Sacramento Valley, is further divided into three distinct dialects, namely the Wintu to the north, the Central Wintun (Nomlaki), and the Southern Wintun (Patwin) (Heizer and Elsasser 1980:14). Due to the three groups sharing linguistic and cultural traits, they were all originally considered to be Wintun. As ethnographic research continued, however, early ethnologist Stephen Powers in 1877 discovered during fieldwork that the Nomlaki and the Patwin were culturally distinguishable (Johnson 1978:350). As their own cultural group, the Patwin were further divided into the Hill Patwin and the River Patwin. The Hill Patwin settled in areas along the Coastal Range foothills to the west. The River Patwin settled along the Sacramento River and various valley creek drainages (and Suisun Bay).

The main political unit for the Patwin was the tribelet, which consisted of a primary village and several satellite villages settled around drainages. The Patwin typically lived in semi-subterranean, earth-covered structures that were oval in shape (Johnson 1978:357-358). Near riparian zones tule was also utilized to create various dwellings. Being autonomous, the tribelet held a specific territory and was led by a Chief who directed most of the economic and ceremonial activities.

HISTORIC SETTING

After Mexico seceded from Spain in 1822, land in California was divided into many large land grants, or *ranchos*. Particularly in the Central Valley, *ranchos* were established to help create stability during a time of upheaval created by European contact. In 1842 Juan Felipe Peña and Manuel Cabeza Vaca settled in the area surrounding much of what is now known as Solano County, and by 1843 they received their first land grant for the Rancho Rio De Los Putos (“River of the Putahs, or Patwin Indians”). The land grant originally consisted of approximately 17,754 ac. (Beck and Haase 1978; Shumway 2007) and incorporated the project area. However, in 1858 the U.S. Government patented a much larger region of 44,384 acres for the Rancho Los Putos.

After the explosion of the Gold Rush and the consequent exploitation of the California Delta, settlers from around the world came to establish farms in and around California’s extensive drainage system. Some turned to agriculture after bad luck with the mines, others pursued it as a lucrative endeavor that others had overlooked. In 1848 two American settlers Albert Lyon and John Patton made the first sale of land from the Rancho Rio De Los Putos, and in the following year Vaca sold nine square ac. of his rancho to William McDaniel. In 1851 McDaniel, as part of his agreement with Vaca, established Villa de Vacaville and was the second town to be surveyed in Solano County. By 1892 Vacaville became incorporated as an official city that became a central community in Solano County for settlers looking to establish farm plots and orchards.

NATIVE AMERICAN COMMUNITY OUTREACH

On August 6, 2020, SAS emailed a letter and a map depicting the project area to the Native American Heritage Commission (NAHC). The letter requested a Sacred Lands File (SLF) search for the project area, and a list of Native American community representatives who might have knowledge concerning cultural resources in the project area or that might have an interest in or concerns with the proposed Project (Attachment B). On August 7, 2020, Ms. Sarah Fonseca, Cultural Resources Analyst for the

NAHC, replied in an emailed letter that the Sacred Lands File search was completed and that no cultural sites or properties were known to be present within or near the project area. Ms. Fonseca also provided a list of local Native American contacts. On August 13, 2020, SAS mailed letters to the following Native American representatives identified by the NAHC:

- Charlie Wright, Chair - Cortina Rancheria – Klestal Dehe Band of Wintun Indians
- Merlene Sanchez, Chair - Guidiville Indian Rancheria
- Anthony Roberts, Chair - Yocha Dehe Wintun Nation

The letters mailed to the above-listed individuals provided a summary of the Project, noted the results of the NAHC SLF record search, and requested any information they might have on cultural sites or concerns they might have with the Project. As of this report, no responses to the letters have been forwarded to SAS but if substantive information is conveyed at a later time, an addendum to this report may be developed.

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

SAS conducted a records search through the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University on July 30, 2020. The NWIC reviewed the CHRIS archives for records of previously known and recorded cultural resources, studies, and isolates in and within one half-mile of the project area. The record search included, but was not necessarily restricted to, a review of the following additional sources:

- The *National Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation)
- The *California Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation)
- The *California Historical Landmarks* (California Office of Historic Preservation)
- The *California Points of Historical Interest* (California Office of Historic Preservation)
- The *California Inventory of Historic Resources* (California Department of Parks and Recreation)

The record search results (NWIC No. 20-0203) (Attachment C) indicated that no cultural resources have been documented within the project area but several studies were conducted in/immediately adjacent (Table 1). An additional eight studies were conducted outside the project area but within the half-mile search area (Table 2). A total of 19 cultural resources were documented in the half-mile record search area (Table 3). Based on the previously documented cultural resources found in the vicinity of the project area, the surrounding vicinity appears to be highly sensitive for exhibiting remains of historic period activities.

Table 1. Studies Previously Conducted in the Project Area

Report #	Author	Title	Date
020960	Jones & Stokes Associates	Archaeological Survey Report for the Rural North Vacaville Water District Water System	1998
020960a	W. Norton - Jones & Stokes Associates	Archaeological Survey Report for the Rural Vacaville Water District Water System, Addendum 1: Additional Survey and Site Recordation	2001
020960b	W. Norton - Jones & Stokes Associates	Archaeological Survey Report for the Rural Vacaville Water District Water System, Addendum 2: Additional Survey and Site Recordation	2001

020960c	G. Roark - Jones & Stokes Associates	Archaeological Survey for Proposed Power Line, West of Tank Site 4 and Archaeological Monitoring/Avoidance Measures at Sites Ca-Sol-402, Ca-Sol-403, and Ca-Sol-404H (letter report)	2002
---------	--------------------------------------	--	------

Table 2. Previously Conducted Studies within a Half-Mile of the Project Area

Report #	Author	Title	Date
009124	Holson and Hager	A Cultural Resources Study for the Vaca Dixon-Moraga 230 kV Transmission Line Reconductoring Project, Contra Costa, Napa, and Solano Counties, California	1987
035122	M. Konzak - LSA Assoc.	Letter Report: Bowles Knoll Water Tank Replacement Project, Cultural Resources Constraints Analysis. LSA Project # SID0801	2008
035709	Pappas and Westwood - ECORP	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	2009
047936	J. Adams -Cardno Entrix	Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, Historical and Architectural Investigations for the Transmission Lines and Lakeville Substation	2012
047936a	PG&E	Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, Archaeological Survey Report	2012
047936b	AECOM	Final Addendum to Archaeological Survey Report, Vaca Dixon-Lakeville 230 kV Reconductoring Project	2013
047936c	C. Rowland-Nawi - OHP	COE_2015_0512_001: Replacement and Upgrade of Forty Miles of Vaca-Dixon Transmission Line as Part of the Vaca-Dixon-Lakeville 230k V Reconductoring Project; Solano, Napa and Sonoma Counties, California	2015
051228	J. Coleman - SAS	Cultural Resources Inventory Report, Lands Of Morgan Project, Solano County, California	2018

Table 3. Previously Documented Cultural Resources within a Half-Mile of the Project Area

Resource # (P-48-)	Association	Type	Last Recorded
000425	Prehistoric	Lithic artifact scatter	1998
000432	Historic era	Water conveyance system and bridge/culvert	1998
000837	Historic era	Trash scatter	2008
000839	Historic era	Well or cistern	2008
000840	Historic era	Standing structure	2008
000841	Historic era	Trash scatter/dump	2008
000843	Historic era	Agricultural equipment	2008
000844	Historic era	Concrete foundation	2008
000845	Historic era	Trash scatter	2008
000846	Historic era	Engineering structure	2008
000847	Historic era	Machinery	2008
000848	Historic era	Machinery	2008

000849	Historic era	Unknown	2008
000850	Historic era	Machinery	2008
000851	Historic era	Agricultural machinery	2008
000852	Historic era	Agricultural machinery	2008
000853	Historic era	Machinery	2008
001604	Historic era	Building/structure remains	2018
001869	Historic era	Water conveyance system	2018

FIELD SURVEY

Methods

On September 3, 2020, SAS archaeologist Marin Millen conducted an intensive pedestrian survey of the project area using parallel transects spaced approximately 15 meters apart. Rodent burrows, other ground openings, and erosional areas were thoroughly inspected for indications of subsurface conditions, and the property was documented with digital photographs (Attachment D, Photos 1-6) and video recordings. A Trimble Juno unit was utilized to verify project area boundaries.

Results

The project area was dominated by low ruderal vegetation, seasonal grasses, and periodic oak trees and bushy plants. Significant portions of the project area were recently (August/September 2020) burned over in a large wildfire (LNU Lightning Complex Fire) which facilitated an examination of the ground surface. Overall ground surface visibility was highly variable but in the burned areas mineral soils were exposed at about 50%+. A single resource, SAS-001 (Attachment E) consisting of a small wood utility shed was documented.

SAS-001

This vernacular historic-era outbuilding is located in a horse pasture near a drainage on the south side of Joslin Road in the English Hills north of Vacaville (Attachment A, Figure 4). The outbuilding measures 7.3 ft. (wide) by 3.9 ft. (deep) by 7.9 ft. (tall) and is constructed of milled wood, machined wire nails, a plywood and shingle roof, and the door appears to be repurposed. A white metal cabinet and shelves were observed inside the structure, but no identifying labels or tags were noted. Surrounding the structure and the banks of the drainage are several large oak trees. The ground visibility averages about 40%, the aspect is to the south, and there is no slope. The recent LNU Lightning Complex fires burned most of the ground surface area surrounding the building, but leaves had since fallen, partially obscuring the ground surface. No additional features or artifacts were observed. Trowel scraping and erosional cuts did not provide any evidence for subsurface deposits. Based on construction materials and condition, this outbuilding was probably built in the 1960s or early 1970s at the earliest. It should be noted that the structure will likely be destroyed during construction of the proposed subdivision.

Background research does not suggest that this building is associated with any specific historically significant individual or event and as such, is recommended not eligible for CRHR listing under criteria 1, or 2. As a small vernacular building with no particular architectural style it shows no evidence of being unique, constructed by a recognized master, nor is it a particularly early or outstanding example of its type. Consequently, SAS recommends SAS-001 not eligible for CRHR listing under Criterion 3. Also, archival and field research and documentation have likely exhausted the data potential of SAS-001 and as a result, SAS recommends it not eligible for CRHR listing under Criterion 4.

SUMMARY AND RECOMMENDATIONS

Both the NAHC and NWIC searches were negative for cultural resources in the project area and no Native American community representatives have expressed an interest in or concerns with the proposed project. An intensive survey resulted in the documentation of a single cultural resource - a vernacular outbuilding probably dating to the 1960s or early 1970s (SAS-001). Due to a lack of significant historical associations and characteristics, and a lack of data potential, SAS recommended SAS-001 not eligible the CRHR listing. Consequently, the Project would have *no impact* on documented cultural resources and no further research or management is recommended.

In the event that presently undocumented buried archaeological deposits are encountered during any Project-associated construction activity, work must cease within a 50-foot radius of the discovery. A qualified archaeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission, which will in turn appoint a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with the Applicant and a qualified archaeologist to determine the proper treatment of the human remains and any associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via Project construction design change.

REFERENCES

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1992 *Research Design for: The Anderson Flat Project, Archaeological Data Recovery Investigations at Sites CA-LAK-72, 509, 510, 536, 542, and 1375, Lake County, California*. On file, Northwest Information Center of the Historical Resources File System, Sonoma State University, Rohnert Park, CA.

ATTACHMENT A

Figures

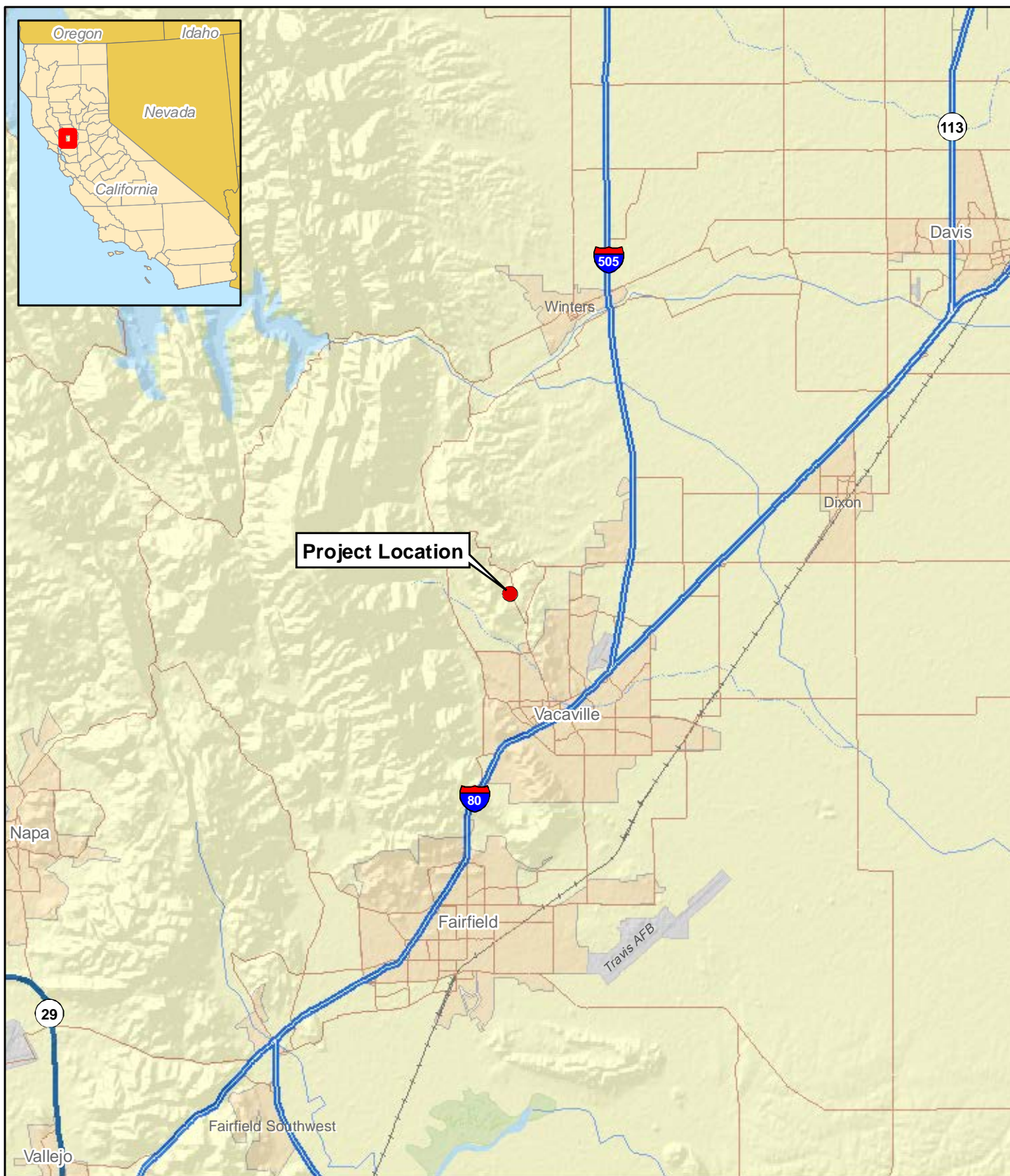


Figure1. Project Vicinity Map.

● 7061 Steiger Hill Road Project Area

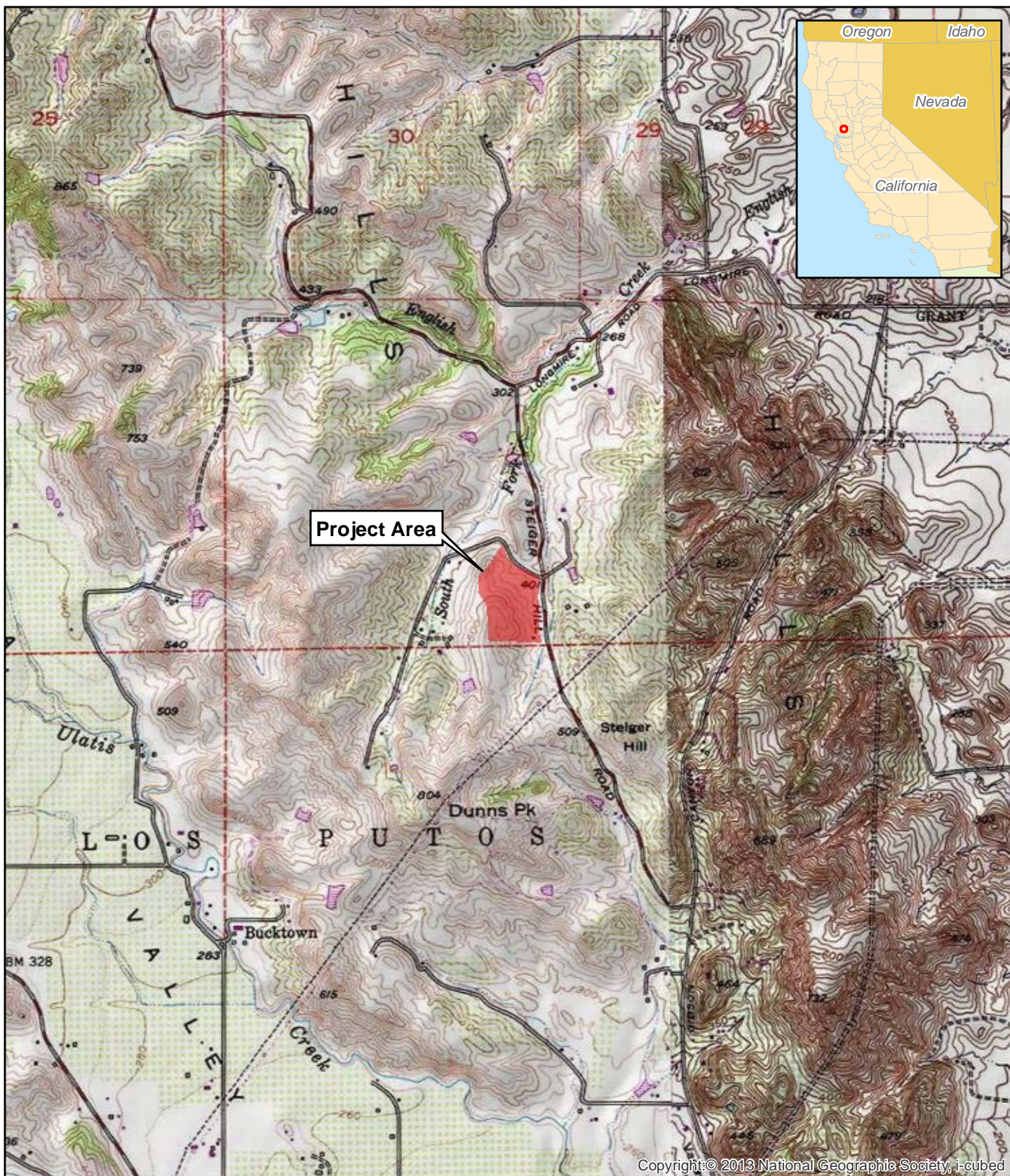
Sources: *USA Base Map* [layer], *Data and Maps* [CD]. ESRI, 2006.

1:250,000

0 3 Miles

0 6 Kilometers





Copyright © 2013 National Geographic Society, i-cubed

Figure 2. Project Location Map.

1:24,000

■ 7061 Steiger Hill Road Project Area

0.5

Miles

1

Kilometers

Los Puntos Land Grant (Presumed T07N, R01W, Section 31).
Mount Vaca 7.5' Series Quadrangles, USGS, 1968, pr 1978.



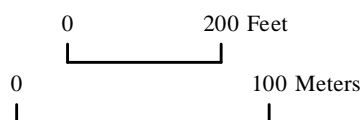


Figure 3. Project Area Map.

 7061 Steiger Hill Road Project Area

Total Acres: 27.80

1:3,000



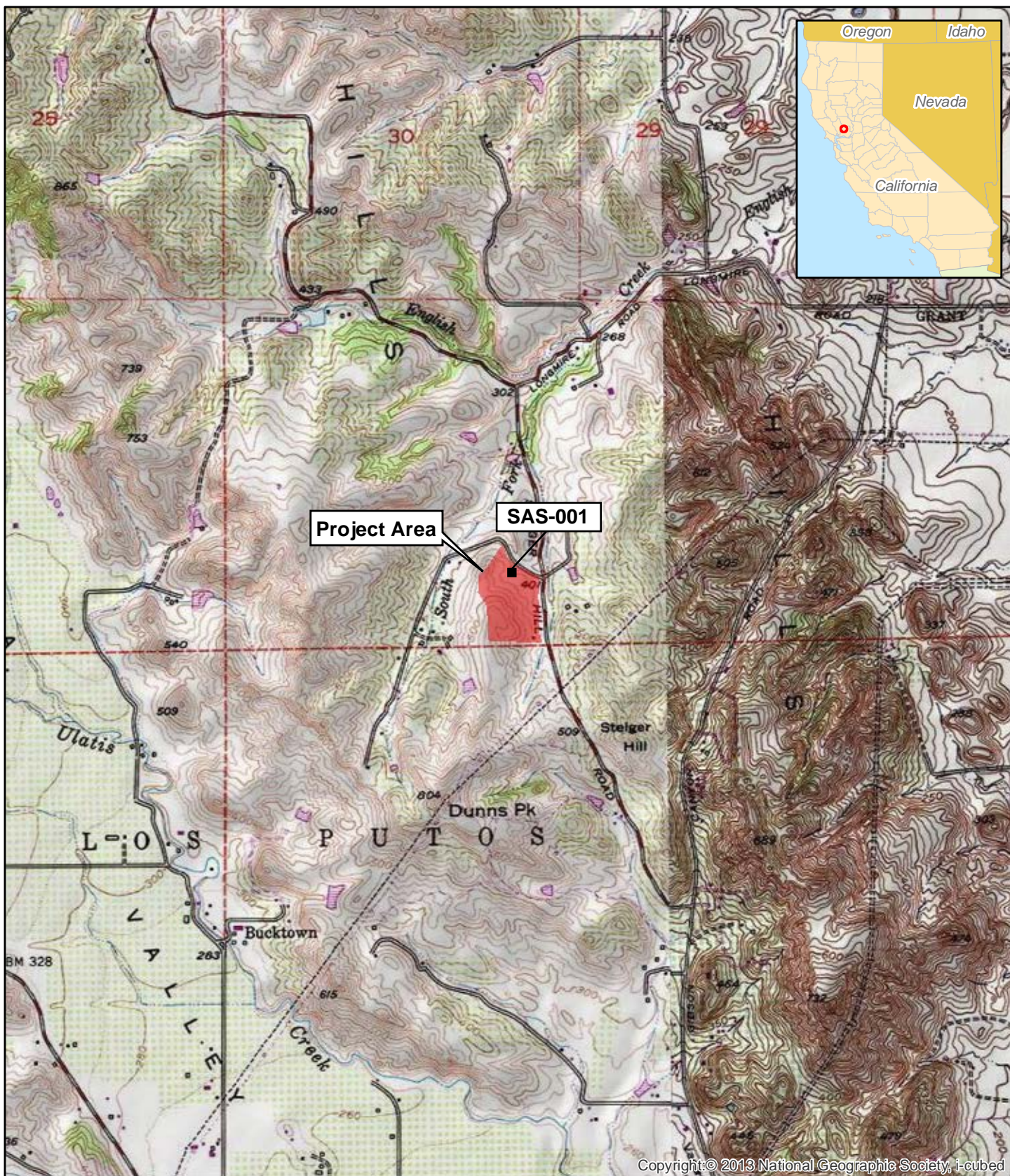


Figure 4. Project Cultural Resources Location Map.

1:24,000

■ 7061 Steiger Hill Road Project Area

0.5

Miles

1

Kilometers

Los Putos Land Grant (Presumed T07N, R01W, Section 31).
Mount Vaca 7.5' Series Quadrangles, USGS, 1968, pr 1978.



ATTACHMENT B

Native American Community Outreach



August 6, 2020

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

Re: 7061 Steiger Hill Road Subdivision Project - Solano County, California

To Whom It May Concern:

Nor-Cal Properties Management, LLC (Nor-Cal) has recently retained Solano Archaeological Services to conduct a CEQA level cultural resources inventory of an approximately 22.97-acre project area for the proposed 7061 Steiger Hill Road Subdivision Project (the project) located in Solano County, California. Nor-Cal proposes to subdivide the existing 22.97-acre property (APN 0105-190-090) into 4 lots. The project area is located at the northwest corner of Steiger Hill Road, and Joslin Lane in the Rural North Vacaville Sphere of Influence. The project area lies on the *Mount Vaca, California* topographic 7.5 minute quadrangle, Los Potos land grant, projected Township 7 North, Range 1 West, Section 31. Please find the enclosed topographic map illustrating the project area location.

A cultural resources inventory will include a pedestrian survey of the project area. Before we commence fieldwork, however, we would like to request a Sacred Lands File review for any known cultural properties or locations in or near the project area. We would also like to request a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area, or that might have an interest in or concerns with the proposed Project. Please know that this request and any subsequent outreach with local tribal representatives is for CEQA planning purposes only, and is not part of SB 18 or AB 52 review.

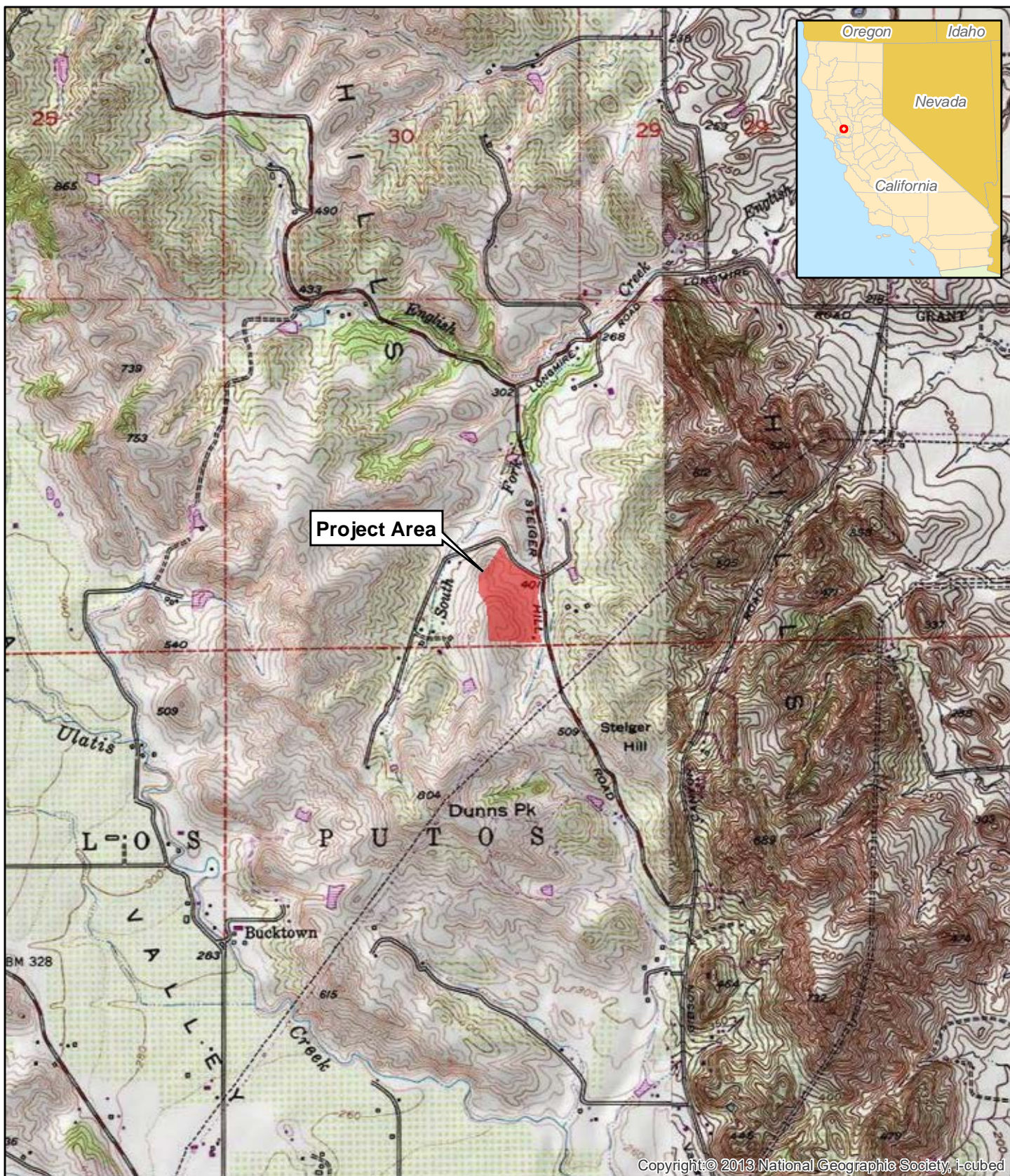
Please email the results of a Sacred Lands File review and a list of tribal contacts to Brian@solanoarchaeology.com. If you have any questions, feel free to contact me at the email provide above or by phone at 530-417-7007.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Ludwig".

Brian Ludwig
Principal Investigator

Enc. Project location map



Project Location Map

1:24,000

■ 7061 Steiger Hill Road Project Area

0.5

Miles

1

Kilometers

Los Puntos Land Grant (Presumed T07N, R01W, Section 31).
Mount Vaca 7.5' Series Quadrangles, USGS, 1968, pr 1978.





NATIVE AMERICAN HERITAGE COMMISSION

August 7, 2020

CHAIRPERSON
Laura Miranda
Luiseño

Brian Ludwig, PhD, Principal Investigator
Solano Archaeological Services

Via Email to: brian@solanoarchology.com

VICE CHAIRPERSON
Reginald Pagaling
Chumash

Re: 7061 Steiger Hill Road Subdivision Project, Solano County

SECRETARY
Merri Lopez-Keifer
Luiseño

Dear Dr. Ludwig:

PARLIAMENTARIAN
Russell Attebery
Karuk

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

COMMISSIONER
Marshall McKay
Wintun

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

COMMISSIONER
[Vacant]

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

COMMISSIONER
[Vacant]

Sincerely,

EXECUTIVE SECRETARY
Christina Snider
Pomo

Sarah Fonseca
Cultural Resources Analyst

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Attachment

**Native American Heritage Commission
Native American Contact List
Solano County
8/7/2020**

***Cortina Rancheria - Kletsel
Dehe Band of Wintun Indians***

Charlie Wright, Chairperson
P.O. Box 1630 Wintun
Williams, CA, 95987
Phone: (530) 473 - 3274
Fax: (530) 473-3301

Guidiville Indian Rancheria

Merlene Sanchez, Chairperson
P.O. Box 339 Pomo
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

Yocha Dehe Wintun Nation

Anthony Roberts, Chairperson
P.O. Box 18 Patwin
Brooks, CA, 95606
Phone: (530) 796 - 3400
Fax: (530) 796-2143
aroberts@yochadehe-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 7061 Steiger Hill Road Subdivision Project, Solano County.



August 13, 2020

Ms. Merlene Sanchez
Guidiville Indian Rancheria
P.O. Box 339
Talmage, CA 95481

RE: 7061 Steiger Hill Road Subdivision Project - Solano County, California

Dear Ms. Sanchez:

Nor-Cal Properties Management, LLC (Nor-Cal) has retained Solano Archaeological Services to conduct a CEQA level cultural resources inventory of an approximately 22.97-acre project area for the proposed 7061 Steiger Hill Road Subdivision Project (the project) located in Solano County, California. Nor-Cal proposes to subdivide the existing 22.97-acre property (APN 0105-190-090) into 4 lots. The project area is located at the northwest corner of Steiger Hill Road, and Joslin Lane in the Rural North Vacaville Sphere of Influence. The project area lies on the *Mount Vaca, California* topographic 7.5 minute quadrangle, Los Putos land grant, projected Township 7 North, Range 1 West, Section 31. Please see the attached topographic map illustrating the project area location.

A review of the Native American Heritage Commission Sacred Lands File (SLF) determined that no documented Native American archaeological sites or cultural properties were known to be present within or near the project area. We are writing to you to solicit any information you might have regarding sites in the project area or concerns you may have with the proposed project. Any input would be greatly appreciated. Please know that this request is for informational purposes only and is not part of SB 18 or AB 52 review.

Thank you very much for your time and I hope to hear from you soon. I can be reached via email at Brian@solanoarchaeology.com or by phone at 530-417-7007.

Sincerely,

Brian Ludwig, Ph.D.
Principal Investigator



August 13, 2020

Mr. Charlie Wright
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
P.O. Box 1630
Williams, CA 95987

RE: 7061 Steiger Hill Road Subdivision Project - Solano County, California

Dear Mr. Wright:

Nor-Cal Properties Management, LLC (Nor-Cal) has retained Solano Archaeological Services to conduct a CEQA level cultural resources inventory of an approximately 22.97-acre project area for the proposed 7061 Steiger Hill Road Subdivision Project (the project) located in Solano County, California. Nor-Cal proposes to subdivide the existing 22.97-acre property (APN 0105-190-090) into 4 lots. The project area is located at the northwest corner of Steiger Hill Road, and Joslin Lane in the Rural North Vacaville Sphere of Influence. The project area lies on the *Mount Vaca, California* topographic 7.5 minute quadrangle, Los Putos land grant, projected Township 7 North, Range 1 West, Section 31. Please see the attached topographic map illustrating the project area location.

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Sincerely,

Brian Ludwig, Ph.D.
Principal Investigator



August 13, 2020

Mr. Anthony Roberts
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, CA 95606

RE: 7061 Steiger Hill Road Subdivision Project - Solano County, California

Dear Mr. Roberts:

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Sincerely,

Brian Ludwig, Ph.D.
Principal Investigator

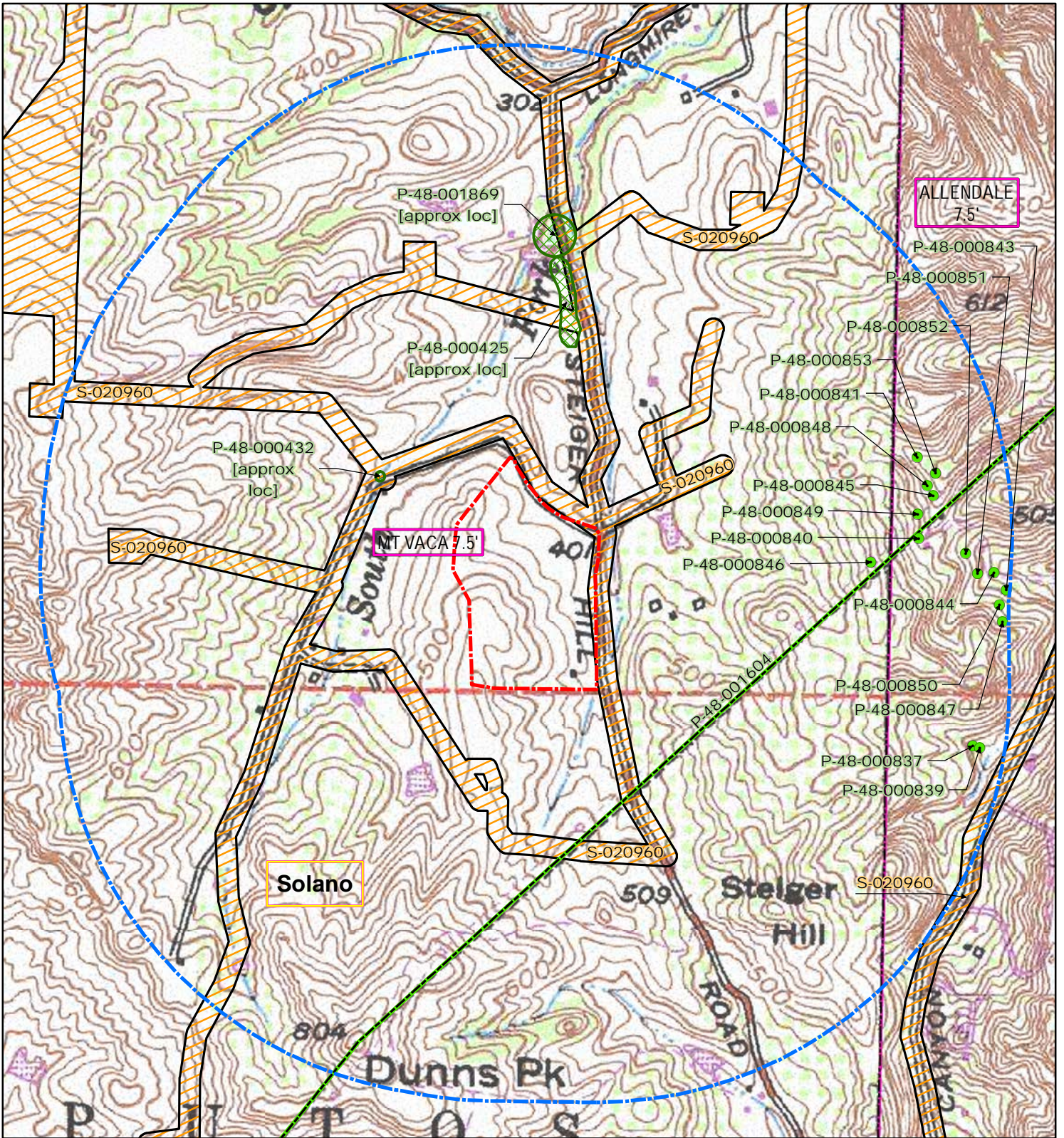
ATTACHMENT C

NWIC Record Search

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-009124		1987	John Holson and Lori Hager	A Cultural Resources Study for the Vaca Dixon-Moraga 230 kV Transmission Line Reconductoring Project, Contra Costa, Napa, and Solano Counties, California	Hager/Holson and Associates	48-000067, 48-000068, 48-000076, 48-000159, 48-000160, 48-000161, 48-000162, 48-000163, 48-000164, 48-000167, 48-000168, 48-000169, 48-001001, 48-001003, 48-001004, 48-001005, 48-001006, 48-001007
S-035122		2008	Mike Konzak	Letter Report: Bowles Knoll Water Tank Replacement Project, Cultural Resources Constraints Analysis. LSA Project # SID0801	LSA Associates, Inc.	
S-035709		2009	Stephen Pappas and Lisa Westwood	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.	48-000837, 48-000839, 48-000840, 48-000841, 48-000842, 48-000843, 48-000844, 48-000845, 48-000846, 48-000847, 48-000848, 48-000849, 48-000850, 48-000851, 48-000852, 48-000853
S-047936	OHP PRN - COE_2015_0512_001	2012	Jeremy Adams	Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, Historical and Architectural Investigations for the Transmission Lines and Lakeville Substation	Cardno ENTRIX	28-001869, 28-001870, 28-001871, 28-001872, 48-000159, 48-000164, 48-000167, 48-000195, 48-000863, 48-001604, 48-001605, 48-001606, 49-000195, 49-005193, 49-005194
S-047936a		2012		Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, Archaeological Survey Report	Pacific Gas & Electric Company	
S-047936b		2013		Final Addendum to Archaeological Survey Report, Vaca Dixon-Lakeville 230 kV Reconductoring Project	AECOM	
S-047936c		2015	Carol Roland-Nawi	COE_2015_0512_001: Replacement and Upgrade of Forty Miles of Vaca-Dixon Transmission Line as Part of the Vaca-Dixon-Lakeville 230k V Reconductoring Project; Solano, Napa and Sonoma Counties, California	Office of Historic Preservation	
S-051228		2018	Jason A. Coleman	Cultural Resources Inventory Report, Lands Of Morgan Project, Solano County, California	Solano Archaeological Services	48-000167, 48-001604, 48-001867, 48-001868, 48-001869

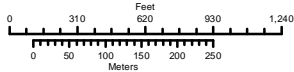
7061 Steiger Hill Road Subdivision Results Map











Northwest Information Center

20-0203 28 Aug 2020 A.Neal

May depict confidential cultural resource locations.
Do not distribute.



- | | | | |
|---|-----------------------|---|----------------------|
|  | project_area_Buffer58 |  | Resources approx loc |
|  | project_area |  | Reports (polygons) |
|  | Resources (points) |  | Quad outlines |
|  | Resources (lines) |  | County outlines |

Resource Detail: P-48-000425

Identifying information

Primary No.: P-48-000425

Trinomial: CA-SOL-000403

Name: NVWD-2

Other IDs:	Type	Name
	Resource Name	NVWD-2

Cross-refs:

Attributes

Resource type: Site

Age: Prehistoric, Historic

Information base: Survey

Attribute codes: AH16 (Other); AP15 (Habitation debris)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
1/5/1998	SCOTT / O'BRIEN	Jones & Stokes Associates	

Associated reports

Report No.	Year	Title	Affiliation
S-020960	1998	Archaeological Survey Report for the Rural North Vacaville Water District Water System	Jones & Stokes Associates
S-025103		VOIDED: subsumed by S-20960 as additional citation 'c'	

Location information

County: Solano

USGS quad(s): Mt Vaca

Address:

PLSS:

UTMs: Zone 10 586710mE 4251350mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 8/22/2016	rinerg	
IC actions: Date	User	Action taken
9/9/1998	AOLPJ	Primary number 48-000425 assigned.
9/9/1998	AOLPJ	Trinomial SOL-000403 assigned.
4/1/2005	jay	Appended records from discontinued ICRDS.
Record status: Verified		

Resource Detail: P-48-000432

Identifying information

Primary No.: P-48-000432

Trinomial:

Name: NVWD-9

Other IDs:	Type	Name
	Resource Name	NVWD-9

Cross-refs:

Attributes

Resource type: Structure

Age: Historic

Information base: Survey

Attribute codes: AH06 (Water conveyance system); HP19 (Bridge) - Culvert

Disclosure: Unrestricted

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
5/1/1998	W.L. Norton & K. Syda	Jones & Stokes	

Associated reports

Report No.	Year	Title	Affiliation
S-020960	1998	Archaeological Survey Report for the Rural North Vacaville Water District Water System	Jones & Stokes Associates

Location information

County: Solano

USGS quad(s): Mt Vaca

Address:

PLSS:

UTMs: Zone 10 586300mE 4251140mN NAD27

Management status

Database record metadata

Date	User	Action taken
Entered: 4/1/2005	icrds	
Last modified: 8/22/2016	rinerg	
IC actions: Date	User	Action taken
9/9/1998	AOLPJ	Primary number 48-000432 assigned.
4/1/2005	jay	Appended records from discontinued ICRDS.
Record status: Verified		

Resource Detail: P-48-000837

Identifying information

Primary No.: P-48-000837

Trinomial:

Name: EC-08-23

Other IDs:	Type	Name
	Resource Name	EC-08-23

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH04 (Privies/dumps/trash scatters)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587484mE 4250645mN NAD27

Management status

Database record metadata

Date	User
Entered: 1/23/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000839

Identifying information

Primary No.: P-48-000839

Trinomial:

Name: EC-08-24

Other IDs:	Type	Name
	Resource Name	EC-08-24

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH05 (Wells/cisterns)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587524mE 4250653mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/6/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000840

Identifying information

Primary No.: P-48-000840

Trinomial:

Name: EC-08-25

Other IDs:	Type	Name
	Resource Name	EC-08-25

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH15 (Standing structures)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587385mE 4251074mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/6/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000841

Identifying information

Primary No.: P-48-000841

Trinomial:

Name: EC-08-26

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Resource Name	EC-08-26

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH04 (Privies/dumps/trash scatters)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587373mE 4251228mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>
<i>Entered:</i> 2/6/2009	jordanl
<i>Last modified:</i> 4/17/2017	surgeonj
<i>IC actions:</i>	
<i>Record status:</i> Verified	

Resource Detail: P-48-000843

Identifying information

Primary No.: P-48-000843

Trinomial:

Name: EC-08-28

Other IDs:	Type	Name
	Resource Name	EC-08-28

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587560mE 4250972mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/6/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000844

Identifying information

Primary No.: P-48-000844

Trinomial:

Name: EC-08-29

Other IDs:	Type	Name
	Resource Name	EC-08-29

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH02 (Foundations/structure pads)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587520mE 5251007mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/6/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000845

Identifying information

Primary No.: P-48-000845

Trinomial:

Name: EC-08-30

Other IDs:	Type	Name
	Resource Name	EC-08-30

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH04 (Privies/dumps/trash scatters)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587394mE 4251151mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/6/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000846

Identifying information

Primary No.: P-48-000846

Trinomial:

Name: IO-08-10

Other IDs:	Type	Name
	Resource Name	IO-08-10

Cross-refs:

Attributes

Resource type: Structure, Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH16 (Other); HP11 (Engineering structure)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Mt Vaca

Address:

PLSS:

UTMs: Zone 10 587281mE 4251034mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/14/2017	bentonb
IC actions:	
Record status: Verified	

Resource Detail: P-48-000847

Identifying information

Primary No.: P-48-000847

Trinomial:

Name: IO-08-11

Other IDs:	Type	Name
	Resource Name	IO-08-11

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587557mE 4250912mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000848

Identifying information

Primary No.: P-48-000848

Trinomial:

Name: IO-08-12

Other IDs:	Type	Name
	Resource Name	IO-08-12

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587391mE 4251176mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000849

Identifying information

Primary No.: P-48-000849

Trinomial:

Name: IO-08-13

Other IDs:	Type	Name
	Resource Name	IO-08-13

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
a 9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587374mE 4251116mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000850

Identifying information

Primary No.: P-48-000850

Trinomial:

Name: IO-08-14

Other IDs:	Type	Name
	Resource Name	IO-08-14

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587534mE 4250950mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000851

Identifying information

Primary No.: P-48-000851

Trinomial:

Name: IO-08-15

Other IDs:	Type	Name
	Resource Name	IO-08-15

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587486mE 4251002mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-000852

Identifying information

Primary No.: P-48-000852

Trinomial:

Name: IO-08-16

<i>Other IDs:</i>	<i>Type</i>	<i>Name</i>
	Resource Name	IO-08-16

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587465mE 4251053mN NAD27

Management status

Database record metadata

<i>Date</i>	<i>User</i>
<i>Entered:</i> 2/9/2009	jordanl
<i>Last modified:</i> 4/17/2017	surgeonj
<i>IC actions:</i>	
<i>Record status:</i> Verified	

Resource Detail: P-48-000853

Identifying information

Primary No.: P-48-000853

Trinomial:

Name: IO-08-17

Other IDs:	Type	Name
	Resource Name	IO-08-17

Cross-refs:

Attributes

Resource type: Other

Age: Historic

Information base: Survey, Other

Attribute codes: AH10 (Machinery); AH16 (Other)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	9/22/2008	Stephen Pappas	ECORP Consulting, Inc.	

Associated reports

Report No.	Year	Title	Affiliation
S-035709	2009	Cultural Resources Inventory: Burton Property, Solano County, California, Project Number 2008-083	ECORP Consulting, Inc.

Location information

County: Solano

USGS quad(s): Allendale

Address:

PLSS:

UTMs: Zone 10 587408mE 4251198mN NAD27

Management status

Database record metadata

Date	User
Entered: 2/9/2009	jordanl
Last modified: 4/17/2017	surgeonj
IC actions:	
Record status: Verified	

Resource Detail: P-48-001604

Identifying information

Primary No.: P-48-001604

Trinomial:

Name: Tulucay-Vaca 230kV

Other IDs: *Type*

Name

Resource Name Tulucay-Vaca 230kV

Other SAS-001 Vaca Dixon-Moraga 230 kV Transmission Line
Segmen

Cross-refs: Physically overlaps or intersects 48-000177

Physically overlaps or intersects 48-000178

Physically overlaps or intersects 48-001605

Physically overlaps or intersects 48-001606

Extends into another county as 28-001870

Attributes

Resource type: Structure

Age: Historic

Information base: Survey

Attribute codes: AH15 (Standing structures); HP11 (Engineering structure)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	<i>Date</i>	<i>Recorder(s)</i>	<i>Affiliation</i>	<i>Notes</i>
a	9/15/2011	Jeremy Adams	Cardno ENTRIX	
b	8/3/2016	J. Coleman	Solano Archaeological Services	
c	8/14/2018	J. Coleman, A. Boltz	Solano Archaeological Services	

Associated reports

<i>Report No.</i>	<i>Year</i>	<i>Title</i>	<i>Affiliation</i>
S-047936	2012	Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, Historical and Architectural Investigations for the Transmission Lines and Lakeville Substation	Cardno ENTRIX
S-048918	2016	Cultural Resources Survey Report for the Chancellor and Eubanks Project, City of Vacaville, Solano County, California	Solano Archaeological Services
S-051228	2018	Cultural Resources Inventory Report, Lands Of Morgan Project, Solano County, California	Solano Archaeological Services
S-053893	2018	Crocker Drive Water Line Extension Project Cultural Resources Records Search and Survey Report, City of Vacaville, Solano County, California	Stantec

Location information

County: Solano

USGS quad(s): Allendale, Fairfield North, Mt George, Mt Vaca

Address:

PLSS:

UTMs:

Management status

Resource Detail: P-48-001604

Database record metadata

<i>Date</i>	<i>User</i>	
<i>Entered:</i> 2/15/2017	grahams	
<i>Last modified:</i> 11/29/2018	yanagig	
<i>IC actions:</i> <i>Date</i>	<i>User</i>	<i>Action taken</i>
6/27/2017	grahams	added recording event b
11/29/2018	yanagig	Added 8/14/2018 Coleman event c. No boundary changes. Re-filed.
<i>Record status:</i> Verified		

Resource Detail: P-48-001869

Identifying information

Primary No.: P-48-001869

Trinomial:

Name: SAS-003 Water Conveyance System

Other IDs: Type Name

Resource Name SAS-003 Water Conveyance System

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey, Other

Attribute codes: AH06 (Water conveyance system); AH11 (Walls/fences)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	Recorder(s)	Affiliation	Notes
a	8/14/2018	J. Coleman, M. Rives, S. Talcott, B. Akey	Solano Archaeological Services	

Associated reports

Report No.	Year	Title	Affiliation
S-051228	2018	Cultural Resources Inventory Report, Lands Of Morgan Project, Solano County, California	Solano Archaeological Services

Location information

County: Solano

USGS quad(s): Mt Vaca

Address:	Address	City	Assessor's parcel no.	Zip code
	Steiger Hill Road	Vacaville		95688

PLSS:

UTMs: Zone 10 586579mE 4251826mN NAD83 (Center point)

Management status

Database record metadata

	Date	User	Action taken
Entered:	11/29/2018	yanagig	
Last modified:	1/7/2019	neala	
IC actions:	Date	User	
	11/29/2018	yanagig	Assigned primary number and trinomial using import tool. Completed database, notified submitter Coleman by email. Shapefiles in 00-GIS S-51228 SOL.

Record status: Verified

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-020960	Voided - S-24833; Voided - S-24834; Voided - S-25103	1998		Archaeological Survey Report for the Rural North Vacaville Water District Water System	Jones & Stokes Associates	48-000122, 48-000167, 48-000424, 48-000425, 48-000426, 48-000427, 48-000428, 48-000429, 48-000430, 48-000431, 48-000432, 48-000511, 48-000532, 48-000533, 48-000534, 48-000535
S-020960a		2001	Bill Norton	Archaeological Survey Report for the Rural Vacaville Water District Water System, Addendum 1: Additional Survey and Site Recordation	Jones & Stokes Associates	
S-020960b		2001	W.L. Norton	Archaeological Survey Report for the Rural Vacaville Water District Water System, Addendum 2: Additional Survey and Site Recordation	Jones & Stokes Associates	
S-020960c		2002	Gabriel Roark	Archaeological Survey for Proposed Power Line, West of Tank Site 4 and Archaeological Monitoring/Avoidance Measures at Sites Ca-Sol-402, Ca-Sol-403, and Ca-Sol-404H (letter report)	Jones & Stokes Associates	

ATTACHMENT D

Representative Project Area Photos



Photo 1. Eastern edge of project area on Steiger Road (Road on left) - view to south



Photo 2. Intersection of Steiger Hill Road and Joslin Lane at north end of project area - view to east



Photo 3. Project area overview - view to southeast



Photo 4. Project area overview - view to northeast



Photo 5. SAS-001 - view to Northeast



Photo 6. SAS-001 - view to northwest

ATTACHMENT E

Site Record - SAS-001

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

* Resource Name or #: SAS-001 Historic-era out-building

P1. Other Identifier:

*P2. Location:		<input checked="" type="checkbox"/> Not for Publication		<input type="checkbox"/> Unrestricted		*a. County:		Solano	
and (P2b and P2c or P2d. Attach a Location Map as necessary.)									
*b USGS 7.5' Quad:		Mount Vaca				Date:		2018	
						T		7N	
						R		1W	
		Unsectioned land, Los Puntos Land Grant		M.D. B.M.					
c. Address:		Commerce Boulevard			City:		American Canyon		Zip: 94503
d. UTM: Zone:		10;		586,525		mE/		4,251,294	
						mN			
						Datum:		NAD 83	
								structure corner	
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)								Elevation: 419 ft asl	

From Main Street in Vacaville, turn right (north) onto Dobbins Street/Gibson Canyon Road and continue for 2.6 miles. Turn left (west) onto Steiger Hill Road and continue for another 1.1 miles to Joslin Lane. Turn left onto Joslin Lane and continue for about 130 meters. Park and walk to the southwest for about 20 meters to the outbuilding, located at the coordinates listed.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This newly documented small historic-era outbuilding is located in a horse pasture near a drainage on the south side of Joslin Road in the English Hills north of Vacaville. The outbuilding measures 7.3 ft (wide) by 3.9 ft (deep) by 7.9 ft (tall) and is constructed of milled wood, machined nails, a plywood and shingle roof, and the door appears to be repurposed. A white metal cabinet and shelves were observed inside the structure, but no identifying labels or tags were noted. Surrounding the structure and the banks of the drainage are several large oak trees. The ground visibility averages about 40%, the aspect is to the south, and there is no slope. The recent LNU Lightning Complex fires burned most of the ground surface area surrounding the structure, but leaves have since fallen, partially obscuring the ground surface. No additional features or artifacts were observed. Trowel scraping and erosional cuts did not provide any evidence for subsurface deposits. As such, SAS recommends the site ineligible for listing in the California Register of Historic Resources. It should be noted that the structure will likely be destroyed during construction of the proposed subdivision.

***P3b. Resource Attributes:** AH15. Outbuilding/shed

***P3d. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a.



P5b. Description of Photo:

Site overview, facing north, August 26, 2020.

***P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**

Nor Cal Property Management LLC
7061 Steiger Hill Road
Vacaville, CA 95688

***P8. Recorded by:**

J. Coleman and M. Millen
Solano Archaeological Services LLC
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

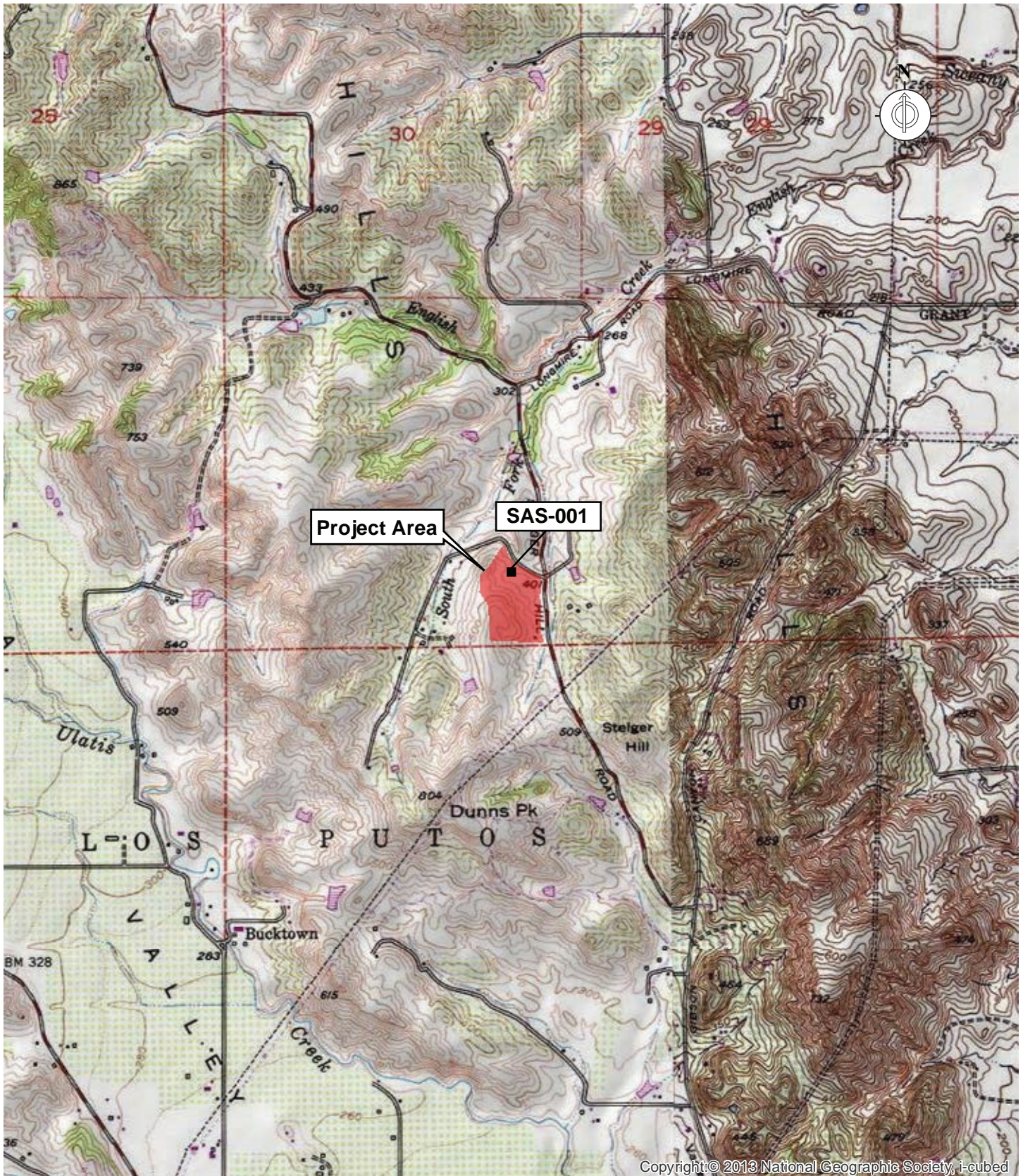
P9. Date Recorded: September 3, 2020

P.10. Survey Type: Intensive pedestrian

***P11. Report Citation:** Cultural Resources Study - 7061 Steiger Hill Road Subdivision Project, Solano County, County, California. Submitted to Nor-Cal Properties Management, LLC.

* Attachments: ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

LOCATION MAP



MOORE BIOLOGICAL CONSULTANTS

September 23, 2020

Mr. Marco Delcampo
102 Vine Street
Vacaville, CA 95668

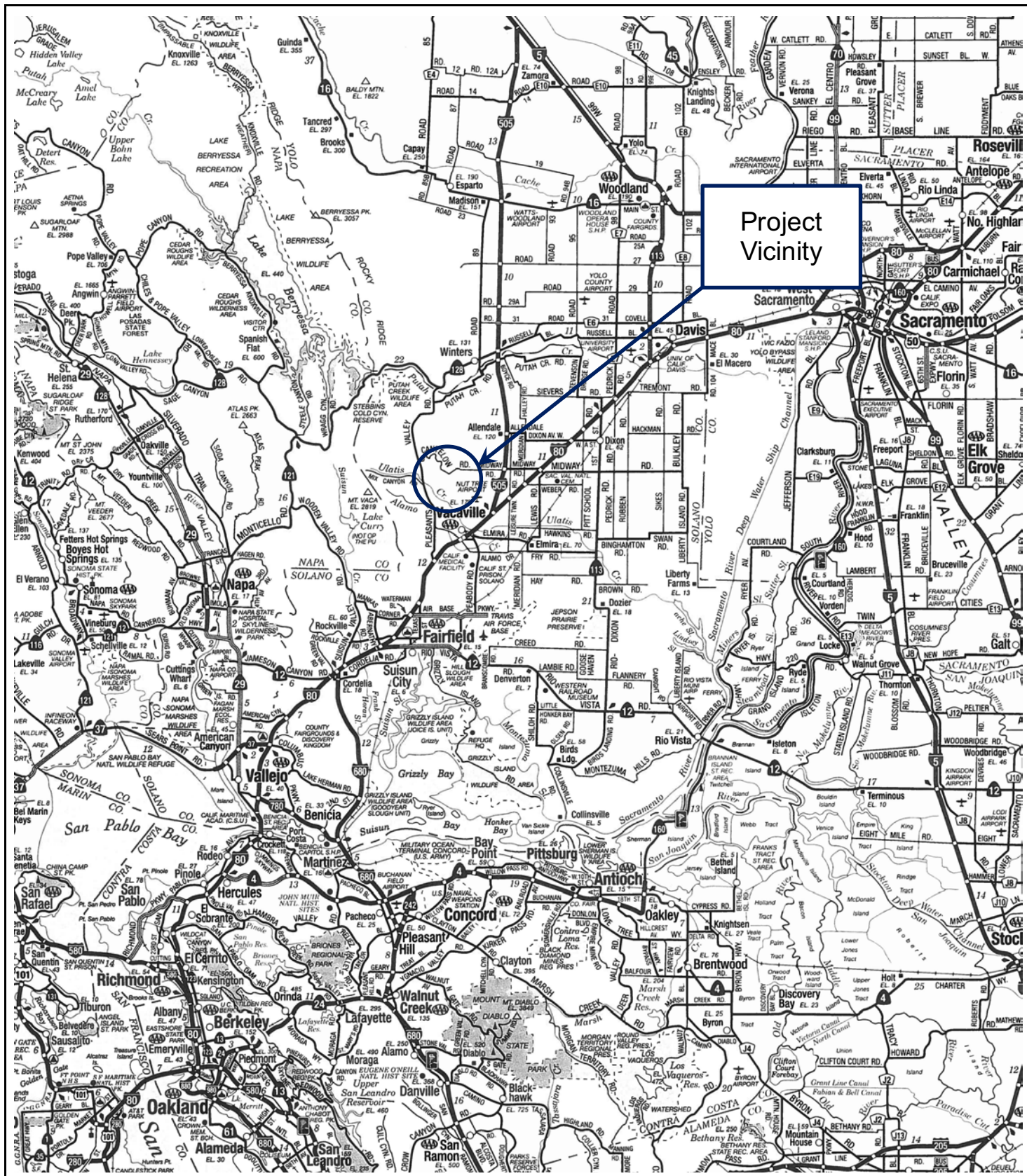
Subject: 23+/- ACRE "MINOR SUBDIVISION MS 20-02", SOLANO COUNTY,
CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Marco:

Thank you for asking Moore Biological Consultants to assist with this project near Vacaville, in Solano County, California (Figures 1 and 2). The purpose of this assessment is to describe existing biological resources in the project site, identify potentially significant impacts to biological resources from the project, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting a field survey to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The site is a 23+/- acre parcel on the west side of Steiger Hill Road and just south of Joslin Lane (Figure 3). The project proposes to subdivide this approximately 23+/- acre site into 4 residential lots, with a designated home site, access driveway, and leach field on the 3 new lots (see Tentative Map in Attachment A).



Source: California State
Automobile Association

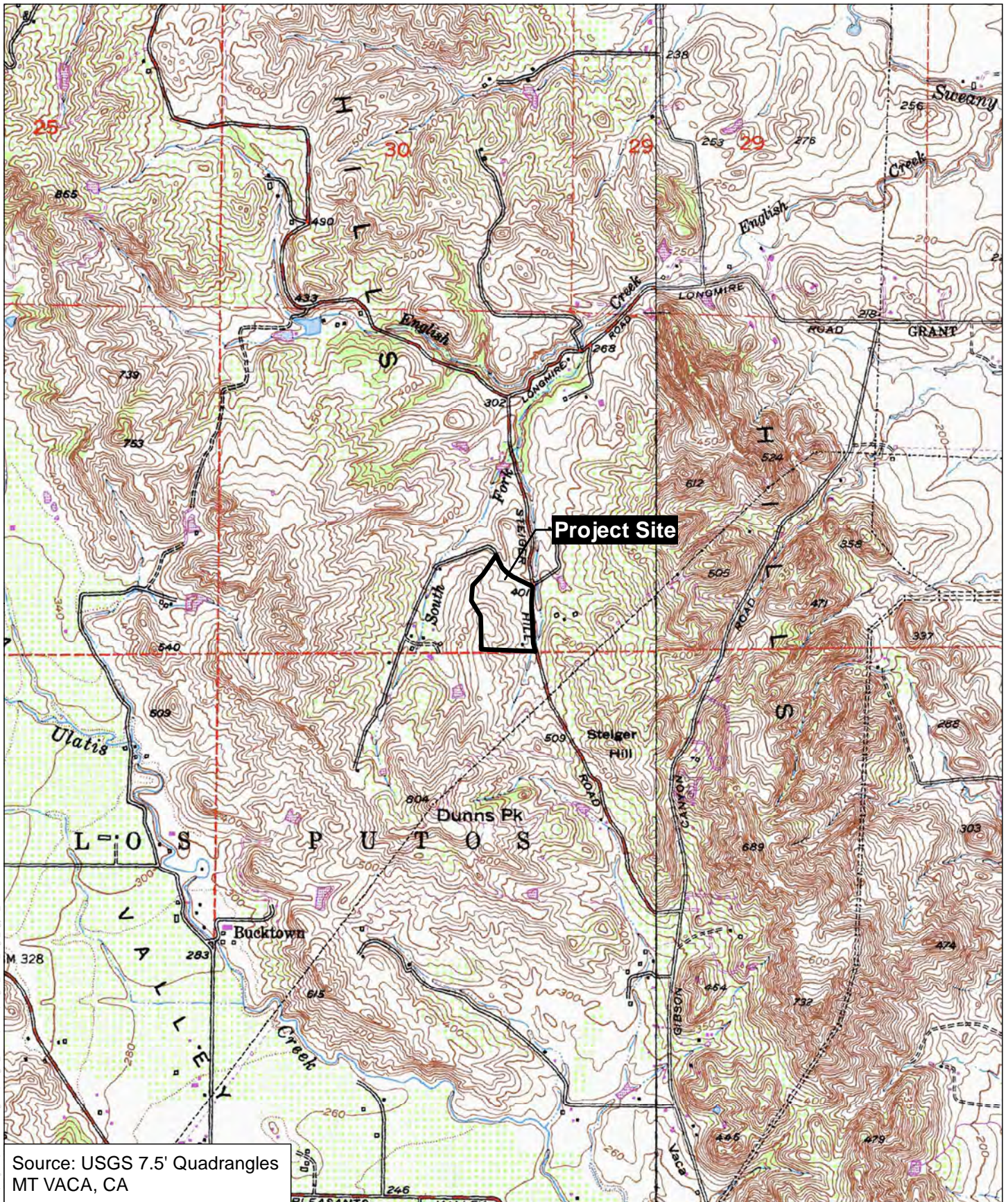
**Moore Biological
Consultants**



0 9 18 Miles

FIGURE 1

PROJECT VICINITY



Source: USGS 7.5' Quadrangles
MT VACA, CA

Figure 2

Moore Biological
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0 1,000 2,000
Feet



Map Date: 08/06/2020

USGS

Steiger Lands

Solano County, CA



Figure 3

Moore Biological
Consultants

0 200 400
Feet

Map Date: 08/06/2020
Aerial Source: Google Earth (09/2018)



AERIAL

Steiger Lands

Solano County, CA

Methods

Prior to the field survey, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB, 2020). The CNDDDB search included the USGS 7.5-minute Mt. Vaca, Allendale, Fairfield Northm and Elmira topographic quadrangles, which encompass approximately 240 square miles surrounding the project site. The United States Fish and Wildlife Service (USFWS) IPaC Trust Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify wildlife and plant species that have been previously documented in the project vicinity or have the potential to occur based on suitable habitat and geographical distribution. The USFWS on-line maps of designated critical habitat were also downloaded.

A field survey was conducted on August 18, 2020. The survey consisted of walking throughout the site making observations of habitat conditions and noting surrounding land uses, general habitat types, and plant and wildlife species. The survey included an assessment of the site for presence or absence of potentially jurisdictional Waters of the U.S. (a term that includes wetlands) as defined by the ACOE (1987; 2008), special-status species, and suitable habitat for special-status species (e.g., salt marshes, vernal pools). Additionally, trees in and near the site were assessed for the potential use by nesting raptors and the site was also searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows that could be utilized by burrowing owls. Areas adjacent to the site were included in the survey, as visibility and access allowed.

Results

GENERAL SETTING: The site is approximately 4.5 miles northwest of Vacaville, in Solano County, California (Figure 1). The site is in an unnumbered Section, in Township 7 North, Range 1 West of the USGS 7.5-minute Mt. Vaca topographic

quadrangle (Figure 2). The site ranges in elevations of approximately 400 to 540 feet above mean sea level; there is a notable hill in the southwest part of the site that slopes down generally northeast.

The site is primarily an east-facing steep hill with a home and a few outbuildings in the southeast corner of the site (Figure 3 and photographs in Attachment C). There are also a few creeks in the site. Several large trees border the creeks and there are also a few trees associated with the home site and along Joslin Road (Figure 3).

This portion of Solano County is primarily open space used for rangeland intermixed with ranchette-style residential parcels. Oak woodlands are also interspersed in this part of Solano County. Joslin Lane bounds the north edge of the site and Steiger Hill Road bounds the east edge of the site. Beyond those roads and the remaining edges of the site are adjacent to oak woodland areas, open space, and a few residential ranchettes on relatively large parcels.

VEGETATION: The site has been subject to substantial disturbance from horse grazing, as well as periodic disking and/or mowing of the open grassland areas. Habitats in the site are moderately to highly disturbed. California annual grassland best describes the disturbed upland grassland vegetation in the site. Oats (*Avena* sp.), foxtail barley (*Hordeum murinum*), soft chess (*Bromus hordeaceus*), and perennial ryegrass (*Lolium perenne*) are dominant grass species on-site. Other grassland species such as filaree (*Erodium botrys*), turkey mullein (*Eremocarpus setigerus*), yellow star thistle (*Centaurea solstitialis*), prickly lettuce (*Lactuca serriola*), and field bindweed (*Convolvulus arvensis*) are intermixed with the grasses. Vegetation observed in the site is listed in Table 1.

Blue oak (*Quercus douglasii*) and interior live oak (*Quercus wizlisenii*) are the dominant trees along the creek in the north part of the site. The creeks in the south part of the site are also shaded by oaks and other tree species including Fremont's cottonwood (*Populus fremontii*), California black walnut (*Juglans*

TABLE 1
PLANT SPECIES OBSERVED IN THE SITE

<i>Abutilon theophrasti</i>	velvetleaf
<i>Aesculus californica</i>	California buckeye
<i>Avena</i> sp.	oat
<i>Bromus diandrus</i>	ripgut brome
<i>Bromus hordeaceus</i>	soft chess brome
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Centaurea calcitrapa</i>	purple starthistle
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centromadia fitchii</i>	Fitch's spikeweed
<i>Cichorium intybus</i>	chicory
<i>Convolvulus arvensis</i>	field bindweed
<i>Cynodon dactylon</i>	Bermuda grass
<i>Eremocarpus setigerus</i>	turkey mullein
<i>Erigeron canadensis</i>	Canada horseweed
<i>Erodium botrys</i>	longbeak stork's bill
<i>Eucalyptus</i> sp.	blue gum
<i>Heliotropium curassavicum</i>	seaside heliotrope
<i>Hordeum murinum</i>	foxtail barley
<i>Juglans californica</i>	California black walnut
<i>Lactuca serriola</i>	prickly lettuce
<i>Lolium perenne</i>	perennial ryegrass
<i>Malva</i> sp.	mallow
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Raphanus sativa</i>	radish
<i>Salix</i> sp.	willow
<i>Salsola tragus</i>	Russian thistle
<i>Schinus terebinthifolius</i>	Brazilian peppertree
<i>Sorghum halepense</i>	Johnson grass
<i>Taeniatherum caput-medusae</i>	medusa-head grass
<i>Tribulus terrestris</i>	puncture vine
<i>Vitis californica</i>	California wild grape
<i>Xanthium strumarium</i>	rough cocklebur

californica), willows (*Salix* sp.), and California buckeye (*Aesculus californica*). Finally, there are a few ornamental trees associated with the residence in the southeast corner of the site including blue gum (*Eucalyptus* sp.), pines (*Pinus* sp.), Brazilian peppertree (*Schinus terebinthifolius*), and other common landscape varietals.

WILDLIFE: Only a few bird species were observed in the site. Northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), acorn woodpecker (*Melanerpes formicivorus*), and California scrub jay (*Aphelocoma californica*) are representative of the avian species observed in the site.

Some of the relatively larger trees in the site as well as other relatively large trees adjacent to and near the site are suitable for nesting raptors and other protected migratory birds. Given the presence of trees and raptor foraging habitat (i.e., open fields) in and near the site, it is possible one or more pairs of raptors, nest in trees in or near the site each year. Further, it is considered likely that a variety of songbirds nest within trees, shrubs, and grassland habitats in and adjacent to the site each year.

A limited variety of mammals common to agricultural and urban areas are likely occur in the project site. California ground squirrels (*Otospermophilus beecheyi*) was the only mammal observed in the site during the field survey. A few ground squirrel burrows and small Botta's pocket gopher (*Thomomys bottae*) burrows were observed within the grasslands in the site. Coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), black-tailed hare (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*) and Virginia opossum (*Didelphis virginiana*) are expected to occur in the project site on occasion. A number of species of small rodents Botta's pocket gopher (*Thomomys bottae*), including mice (*Mus musculus*, *Reithrodontomys megalotis*, and *Peromyscus maniculatus*) and voles (*Microtus californicus*) also likely occur.

Due to lack of suitable habitat and the location of the site, few amphibians and reptiles are expected to use habitats in the site. Western fence lizard no amphibians were observed. Other common species such as gopher snake (*Pituophis melanoleucus*), common king snake (*Lampropeltis getulus*), western skink (*Eumeces skiltonianus*), western rattlesnake (*Crotalis viridis*), and Pacific chorus frog (*Pseudacris regilla*) may occur in the site on occasion. The creeks in the project site are dry much of the year, but when they do contain water, the suitability of these creeks for common amphibians increases.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Both CDFW and ACOE have jurisdiction over modifications to riverbanks, lakes, stream channels and other wetland features.

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

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

The only potentially jurisdictional Waters of the U.S. in the site are an intermittent creek and two ephemeral creeks (Figure 4). The intermittent creek is in the southeast part of the site and encompasses approximately 0.02 acres. The ephemeral creeks are situated in the northwest and southeast parts of the site and encompass a total of approximately 0.06 acres. The primary difference between the intermittent and ephemeral creeks is that the intermittent creek is seasonal in nature and flowing for an extended entirely rain dependent, and flow during and very shortly following heavy rainfall events.

The ephemeral creeks in the site have moderately well defined beds and banks with the limit of potential jurisdiction being the ordinary high water marks (OHWM) along the banks of the creeks. Each of the creeks is approximately 3 feet wide, as defined by the OHWM. Neither of the ephemeral creeks in the site is depicted as a “blue-line” stream on the USGS topographic map, nor are they labeled as aquatic features on the National Wetland Inventory (NWI) Map (Attachment D). In contrast, the intermittent creek has well defined bed and banks and is approximately 8 feet wide, as defined by the OHWM. This creek is depicted as a blue-line stream on the USGS topographic map (Figure 2) and is mapped as a “Freshwater Forested/Shrub Wetland” in NWI (Attachment D).

All of the creeks on the site are tributary to English Creek, a tributary to Sweany Creek, which flows in to the Sacramento River by way of Cache Slough. While the jurisdictional status of the creeks has not been established, the intermittent creek is believed to be a jurisdictional Water of the U.S. due to its flow regime and tributary relationship with the Sacramento River. Due to their ephemeral flow regimes, the ephemeral creeks in the site do not appear to meet the technical and regulatory criteria of jurisdictional Waters of the U.S.

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



Figure 4

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Consultants

Potential Waters of the U.S.

Steiger Lands

Solano County, CA

endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

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

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2020). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 2 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Twenty-four (24) species of special-status plants were identified in the CNDDDB (2020) search: alkali milk-vetch (*Astragalus tener* var. *tener*), heartscale (*Atriplex cordulata* var. *cordulata*), brittlescale (*Atriplex depressa*), pappose tarplant (*Centromadia parryi* spp. *parryi*), hispid salty bird's-beak (*Chloropyron molle* spp. *hispidum*), recurved larkspur (*Delphinium recurvatum*), dwarf downingia (*Downingia pusilla*), San Joaquin spearscale (*Extriplex joaquinana*), adobe-lily (*Fritillaria pluriflora*), Brewer's western flax (*Hesperolinon breweri*), Carquinez goldenbush (*Isocoma arguta*), Contra Costa goldfields (*Lasthenia conjugens*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), legenere (*Legenere limosa*), Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*), San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), bearded popcornflower (*Plagiobothrys hystriculus*), California alkali grass (*Puccinellia simplex*), Keck's checkerbloom (*Sidalcea keckii*), slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpine*), Suisun Marsh aster (*Symphyotrichum lentum*), two-fork clover (*Trifolium amoenum*), saline clover (*Trifolium hydrophilum*) and oval-leaved viburnum (*Viburnum ellipticum*) (Table 2 and Attachment B). The USFWS IPaC Trust Report does not contain any special-status plants species.

No special-status plants or highly suitable habitat for special-status plants was observed in the site. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as native grasslands, chaparral, vernal pools, marshes and swamps, seasonal wetlands, and areas with unusual soils. Almost all of the species in Table 2 occur in one of these unique habitat types that are not present on-site. There are no chaparral areas in the site and no areas of unusual soils (i.e. alkaline, serpentine) were observed in the site. Horse trampling is extensive in the grasslands in the site body of the site, and the highly disturbed upland grasslands are not suitable for any of the special-status plants in Table 2 or any other special-status plant species. Further, the creeks in the project site are dry much of the year and do not contain suitable aquatic habitat characteristics needed by several of the plants identified. Due to lack of suitable habitat, it is unlikely that special-status plants occur in the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
PLANTS						
Alkali milk-vetch	<i>Astragalus tener</i> <i>var. tener</i>	None	None	1B	Alkali playas and vernal pools	Unlikely: there are no playas or vernal pools in the site. The nearest occurrence of alkali milk vetch in the CNDDDB (2020) search area is a record mapped nonspecifically approximately 6 miles southeast of the site.
Heartscale	<i>Atriplex</i> <i>cordulata</i> var. <i>cordulata</i>	None	None	1B	Valley and foothill grassland, chenopod scrub.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for heartscale. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 6 miles southeast of the site.
Brittlescale	<i>Atriplex</i> <i>depressa</i>	None	None	1B	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pool habitats within alkaline clay soils.	Unlikely the highly disturbed grasslands in the site do not provide suitable habitat for this species; there are no playas or vernal pools in the site. The nearest occurrence of brittlescale in the CNDDDB (2020) search area is approximately 8 miles southeast of the site.
Pappose tarplant	<i>Centromadia</i> <i>parryi</i> spp. <i>parryi</i>	None	None	1B	Coastal prairie and salt marsh, meadows and seeps, vernal mesic areas in valley and foothill grassland; often alkaline soils.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for this species. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 5.5 miles south of the site.
Hispid salty bird's-beak	<i>Chloropyron</i> <i>molle</i> spp. <i>hispidum</i>	None	None	1B	Meadows, playas, valley and foothill grassland.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for this species; there are no playas or meadows in the site. The nearest occurrence of hispid salty bird's-beak in the CNDDDB (2020) search area is approximately 13 miles southeast of the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Recurved larkspur	<i>Delphinium recurvatum</i>	None	None	1B	Chenopod scrub, valley and foothill grassland, and cismontane woodland; alkaline soil.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for recurved larkspur. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 2 miles east of the project site.
Dwarf downingia	<i>Downingia pusilla</i>	None	None	2	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of dwarf downingia in the CNDDDB (2020) search area is approximately 8.5 mile southeast of the site.
San Joaquin spearscale	<i>Extriplex joaquinana</i>	None	None	1B	Chenopod scrub, alkali meadow, valley and foothill grassland.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for this species. The nearest occurrence of San Joaquin spearscale in the CNDDDB (2020) search area is approximately 5.5 miles south of the project site.
Adobe-lily	<i>Fritillaria pluriflora</i>	None	None	1B	Chaparral, cismontane woodland, valley and foothill grassland.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for adobe-lily. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 3.5 miles southeast of the site.
Brewer's western flax	<i>Hesperolinon breweri</i>	None	None	1B	Chaparral, cismontane woodland and valley and foothill grassland, usually in serpentinite soils.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for Brewer's western flax; no serpentine soils were observed in the site. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 1.5 miles west of the site.
Carquinez goldenbush	<i>Isocoma arguta</i>	None	None	1B	Valley and foothill grassland, in alkaline soils.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for Carquinez goldenbush; the site is also well above the elevation range of this species (CNPS, 2020). The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 8.5 miles southeast of the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Contra Costa goldfields	<i>Lasthenia conjugens</i>	E	None	1B	Valley and foothill grassland within vernal pools and swales.	Unlikely: there are no vernal pools or seasonal wetland swales in the site. The nearest occurrence of Contra Costa goldfields in the CNDDDB (2020) is a record mapped nonspecifically approximately 6 miles southeast of the site. The site is not in designated critical habitat of this species (USFWS 2005a).
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	None	None	1B	Vernal pools in valley and foothill grassland habitats; usually found on alkaline soils.	Unlikely: there are no vernal pools in the site. The nearest occurrence of Coulter's goldfields in the CNDDDB (2020) search area is approximately 10 miles southeast of the site.
Legenere	<i>Legenere limosa</i>	None	None	1B	Vernal pools within the Central Valley.	Unlikely: there are no vernal pools in the site. The nearest occurrence of legenere in the CNDDDB (2020) search area is approximately 6.5 miles southeast of the site.
Baker's navarretia	<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	None	None	1B	Vernal pools and swales within a variety of vegetation communities.	Unlikely: there are no vernal pools in the site. The nearest occurrence of Baker's navarretia in the CNDDDB (2020) search area is 4 miles southeast of the site.
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	T	E	1B	Vernal pools.	Unlikely: there are no vernal pools in the site. The nearest occurrence of San Joaquin Valley Orcutt grass recorded in the CNDDDB (2020) search area is approximately 11.5 miles southeast of the site. The site is not in designated critical habitat for this species (USFWS 2005a).
Bearded popcornflower	<i>Plagiobothrys hystriculus</i>	None	None	1B	Vernal pools, valley and foothill grassland.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for this species; there are no vernal pools in the site. The nearest occurrence of bearded popcornflower in the CNDDDB (2020) search area is approximately 3 miles east of the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
California alkali grass	<i>Puccinellia simplex</i>	None	None	1B	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pool habitats; in alkaline, vernal mesic sinks, flats, and lake margins.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for this species. The nearest occurrence of California alkali grass in the CNDDDB (2020) search area is approximately 11.5 miles southwest of the site.
Keck's checkerbloom	<i>Sidalcea keckii</i>	E	None	1B	Cismontane woodland, valley and foothill grassland, usually serpentine or clay soils.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for Keck's checkerbloom. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 4 mile northeast of the site.
Slender-leaved pondweed	<i>Stuckenia filiformis</i> ssp. <i>alpine</i>	None	None	2	Marshes and swamps.	Unlikely: there is no marsh or swamp habitat in the site. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 10.5 miles southwest of the site.
Suisun Marsh aster	<i>Symphyotrichum lentum</i>	None	None	1B	Marshes and swamps.	Unlikely: there is no marsh or swamp habitat in the site. The nearest occurrence of Suisun marsh aster in the CNDDDB (2020) search area is approximately 8.5 miles southeast of the site.
Two-fork clover	<i>Trifolium amoenum</i>	E	None	1B	Valley and foothill grassland and coastal bluff scrub, sometimes on serpentine soils.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for two-fork clover; no serpentine soils were observed in the site. The nearest occurrence of two-fork clover in the CNDDDB (2020) search area is approximately 3.5 miles southeast of the site.
Saline clover	<i>Trifolium hydrophilum</i>	None	None	1B	Marshes and swamps, mesic areas in valley and foothill grassland, vernal pools.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for saline clover; there are no vernal pools, marshes, or swamps in the site. The nearest occurrence of saline clover in the CNDDDB (2020) search area is approximately 5 miles southwest of the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Oval-leaved viburnum	<i>Viburnum ellipticum</i>	None	None	2	Chaparral, cismontane woodland and lower montane coniferous forest.	Unlikely: the highly disturbed grasslands in the site do not provide suitable habitat for oval-leaved viburnum; the site is also below the elevation range of this species (CNPS, 2020). The nearest occurrence of oval-leaved viburnum in the CNDDDB (2020) search area is approximately 11 miles southwest of the site.
WILDLIFE						
Birds						
Burrowing owl	<i>Athene cunicularia</i>	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: no burrowing owls or burrows with evidence of owl occupancy were observed in the site. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 3 miles east of the project site.
Swainson's hawk	<i>Buteo swainsoni</i>	None	T	N/A	Nests in large trees, usually within riparian corridors. Forages in agricultural fields and annual grassland.	Unlikely: there are a few large trees in and adjacent to the site that may be used by nesting Swainson's hawks; the grasslands in the site provide marginal, yet suitable foraging habitat. The nearest occurrence of nesting Swainson's hawks in the CNDDDB (2020) search area is approximately 1.5 miles southwest of the site.
Tricolored blackbird	<i>Agelaius tricolor</i>	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub.	Unlikely: the site does not provide suitable nesting habitat for this species. The nearest occurrence of tricolored blackbirds in the CNDDDB (2020) search area is approximately 7 miles southeast of the site.
White-tailed kite	<i>Elanus leucurus</i>	None	FP	N/A	Herbaceous lowlands with variable tree growth and dense population of voles.	Unlikely: there are a few large trees in and adjacent to the site that may be used by nesting white-tailed kite; the grasslands provide suitable foraging habitat. The nearest occurrence of white-tailed kite in the CNDDDB (2020) search area is approximately 11.5 miles southeast of the site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Grasshopper sparrow	<i>Ammodramus savannum</i>	None	SC	N/A	Dense grasslands, lowland plains, and lower mountain slopes; prefers native grasses with scattered shrubs.	Unlikely: the highly disturbed grasslands in the site provides poor quality habitat for grasshopper sparrow. The nearest occurrence of grasshopper sparrow in the CNDDDB (2020) search area is approximately 10 miles southeast of the site.
Yellow-breasted chat	<i>Icteria virens</i>	None	SC	N/A	Riparian thickets of willow and other brushy tangles near watercourses.	Unlikely: the site does not provide high quality riparian habitat to support this species. The nearest record of yellow-breasted chat in the CNDDDB (2020) search area is approximately 5.5 miles northwest of the project site.
Northern spotted owl	<i>Strix occidentalis caurina</i>	T	T	N/A	Mixed aged stands of old growth and mature trees; usually damp, dense, shaded forests. Occasionally found in younger forests.	Unlikely: the site does not provide suitable habitat for this species. There are no occurrences of northern spotted owl in the CNDDDB (2020) search area.
Mammals American badger	<i>Taxidea taxus</i>	None	SC	N/A	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils	Unlikely: the highly disturbed grasslands in the site do not contain suitable habitat for this species and no American badger dens were observed during the survey. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 3 miles southeast of the site.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	None	SC	N/A	Desert scrub, mixed conifer forest, and pinyon-juniper or pine forest; primarily roosts in caves, mines and buildings	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 3 miles southeast of the site.
Suisun shrew	<i>Sorex ornatus</i>	None	SC	N/A	Tidal marshes of the northern shores of San Pablo Bay and Suisun Bay.	Unlikely: the site does not contain suitable marsh habitat for this species. The nearest occurrence of Suisun shrew in the CNDDDB (2020) search area is approximately 11.5 miles southwest of the project site.

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Reptiles & Amphibians						
California tiger salamander	<i>Ambystoma californiense</i>	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable breeding habitat in or near the site for California tiger salamander. The closest occurrence of this species in the CNDDDB (2020) search area is approximately 8 miles southeast of the site. The site is not in designated critical habitat for this species (USFWS, 2005b).
California red-legged frog	<i>Rana draytonii</i>	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: the site does not contain suitable habitat for this species. There are no occurrences of California red-legged recorded in the CNDDDB (2020) search area. The site is not in designated critical habitat for this species (USFWS, 2006).
Foothill yellow-legged frog	<i>Rana boylei</i>	None	SC	N/A	Perennial water bodies (i.e., streams and ponds) with abundant riparian vegetation; not found on Central Valley floor.	Unlikely: there is no suitable aquatic habitat for foothill yellow-legged frog in the site. The nearest occurrence of this species in the CNDDDB (2020) search area is a record mapped nonspecifically approximately 3 miles southwest of the site.
Giant garter snake	<i>Thamnophis gigas</i>	T	T	N/A	Freshwater marsh and low gradient streams; may use canals and ditches for dispersal or migration.	Unlikely: there is no suitable habitat in the site for giant garter snake. There are no occurrences of this species recorded in the CNDDDB (2020) within the search area.
Western pond turtle	<i>Emys marmorata</i>	None	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: the site does not provide suitable habitat for western pond turtle. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 4 miles southeast of the site.
Fish						
Delta smelt	<i>Hypomesus transpacificus</i>	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no suitable aquatic habitat in the site. There are no occurrences of delta smelt recorded in the CNDDDB (2020) within the search area. The site is not within designated critical habitat for delta smelt (USFWS, 1994).

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Invertebrates						
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools in the site. The nearest occurrence of Conservancy fairy shrimp in the CNDDDB (2020) search area is approximately 11 miles southeast of the site. The site is not in designated critical habitat for Conservancy fairy shrimp (USFWS 2005a).
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	None	N/A	Vernal pools	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDDB (2020) search area is approximately 3.5 miles east of the site. The site is not in designated critical habitat of this species (USFWS 2005a).
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E	None	N/A	Vernal pools and seasonally wet depressions within the Central Valley	Unlikely: there are no vernal pools or seasonal wetlands in the site. The nearest occurrence of vernal pool tadpole shrimp in the CNDDDB (2020) search area is approximately 4 miles southeast of the site. The site is not within designated critical habitat for this species (USFWS 2005a).
California freshwater shrimp	<i>Syncaris pacifica</i>	E	None	N/A	Low-elevation perennial streams in the northern Bay Area.	Unlikely: there is no suitable aquatic habitat in the site; this species is also not known from this area. There are no occurrences of California freshwater shrimp recorded in the CNDDDB (2020) within the search area.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills	Unlikely: there are no blue elderberry shrubs in or adjacent to the site. The nearest occurrence of valley elderberry longhorn beetle recorded in the CNDDDB (2020) search area is approximately 2.5 miles southwest of the site. The site is not in designated critical habitat for this species (USFWS 1980a).

TABLE 2

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status ¹	State Status ¹	CNPS List ²	Habitat	Potential for Occurrence in the Project Site
Delta green ground beetle	<i>Elaphrus viridis</i>	T	None	N/A	Margins of vernal pools in grasslands.	Unlikely: there are no vernal pools in the site. The closest occurrence of delta green ground beetle in the CNDDDB (2020) search area is approximately 11.5 miles southeast of the site. The site is not within designated critical habitat for this species (USFWS 1980b).
Crotch bumble bee	<i>Bombus crotchii</i>	None	CE	N/A	Open grassland and scrub habitat throughout California; rarely found in the Central Valley.	Unlikely: the site lacks the floristic requirements for Crotch bumble bee. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 5 miles south of the project site.
Western bumble bee	<i>Bombus occidentalis</i>	None	CE	N/A	Meadows and grasslands with abundant floral resources, usually high elevation	Unlikely: the site provides marginal habitat for western bumble bee. The nearest occurrence of this species in the CNDDDB (2020) search area is approximately 3.5 miles southeast of the site.

¹ T= Threatened; E = Endangered.

² T = Threatened; E = Endangered; CE = Candidate for Endangered; FP = Fully Protected Species; SC = State of California Species of Special Concern.

³ CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes plants that are rare, threatened or endangered in California but are more common elsewhere.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of the site by special-status wildlife species is low. Special-status wildlife species recorded in project area in the CNDDDB (2020) query include burrowing owl, Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), white-tailed kite (*Elanus leucurus*), grasshopper sparrow (*Ammodramus savannum*), yellow-breasted chat (*Icteria virens*), American badger (*Taxidea taxus*), Townsend's big-eared bat (*Corynorhinus townsendii*), Suisun shrew (*Sorex ornatus*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), western pond turtle (*Emys marmorata*), Conservancy fairy shrimp (*Branchinecta conservatio*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), delta green ground beetle (*Elaphrus viridis*), Crotch bumble bee (*Bombus crotchii*) and western bumble bee (*Bombus occidentalis*).

The following species are not recorded in the CNDDDB within the search area, but are on the USFWS IPac Trust Report: northern spotted owl (*Strix occidentalis caurina*), California red-legged frog (*Rana aurora draytonii*), giant garter snake (*Thamnophis gigas*), delta smelt (*Hypomesus transpacificus*) and California freshwater shrimp (*Syncaris pacifica*) (Attachment B).

While the project site may have provided habitat for a few special-status wildlife species at some time in the past, agriculture, development, and other activities have substantially modified the natural habitats in the greater project vicinity, including those on the site. Of the wildlife species identified in the CNDDDB search and USFWS IPaC Trust Report, Swainson's hawk is the only special-status species that has potential to occur in the site on more than a transitory or very occasional basis and is discussed further below.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15).

Swainson's hawk are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

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

The CNDDDB (2020) contains several records of nesting Swainson's hawk in the greater project vicinity, primarily a few miles east of the project site on the valley floor. The nearest record of nesting Swainson's hawks is approximately 1.5 miles southwest of the site. There are suitable nest trees in and adjacent to the project site, although use of the area by nesting Swainson's hawks is viewed as unlikely. As described above, the grasslands in the site are highly disturbed by extensive horse grazing and provide low quality, but potentially suitable foraging habitat for Swainson's hawk. Due to the limited footprint of future development and the limited value of the disturbed grassland habitat in the site for Swainson's hawk foraging, the proposed large-lot residential development would result in a less than a significant reduction of potential Swainson's hawk foraging habitat.

OTHER SPECIAL-STATUS SPECIES: Due to high levels of disturbance from horse grazing, residential uses, and periodic disking and/or mowing of the open grassland areas, the site does not provide suitable habitat for any other special-status wildlife species identified in the CNDDDB search. Special-status birds may fly over or forage in the site on occasion, but few would be expected to nest in the area. Further, the foraging habitat values of the native annual grassland habitat historically present in this area has been substantially diminished by the high levels of disturbance from horse grazing, development, and other activities

in and adjacent to the site. Only a few ground squirrel burrows that may be potentially suitable for burrowing owl were observed in the site; the small pocket gopher burrows in the grasslands are too small to be utilized by burrowing owl. These burrows were inspected for evidence of burrowing owls and none was observed. The site does not provide suitable nesting habitat for tricolored blackbird, white-tailed kite, grasshopper sparrow, yellow-breasted chat, or northern spotted owl.

Townsend's big-eared bat may fly over or forage in the site and may roost on occasion in on-site trees; however, this species primarily roosts in caves, mines, and buildings. No American badger dens were observed in the site and the disturbed grasslands in the site do not provide high quality habitat for this species. The site does not provide suitable habitat for Suisun shrew, which is associated with tidal marsh habitat.

The ephemeral and intermittent creeks in the site do not provide suitable aquatic habitat for California tiger salamander, California red-legged frog, foothill yellow-legged frog, giant garter snake or western pond turtle.

The site does not provide suitable aquatic habitat for special-status fish or California freshwater shrimp. There are no vernal pools or seasonal wetlands in the site for Conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp or delta green ground beetle. There are no blue elderberry shrubs observed in the site, precluding the presence valley elderberry longhorn beetle. The site lacks the floristic requirements for intensive use by special-status bee species.

CRITICAL HABITAT: The site is not in designated critical habitat of California red-legged frog (USFWS, 2006), vernal pool shrimp or plants (USFWS, 2005a), California tiger salamander (USFWS, 2005b), Hispid salty bird's-beak and/or Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) (USFWS, 2007), delta green ground beetle (USFWS, 1980a), valley elderberry longhorn beetle

(USFWS, 1980b), delta smelt (USFWS, 1994), green sturgeon (NOAA, 2009), or any other federally listed species (Attachment E).

Conclusions and Recommendations

- The site primarily consists of highly disturbed upland grasslands. There are a few trees, primarily associated with the three creeks in the site and the residence in the southeast part of the site. There are no habitats considered sensitive in the site; the site is biologically unremarkable.
- The only potentially jurisdictional Waters of the U.S. is the site is an intermittent creek and two ephemeral creeks, encompassing a total of approximately 0.08 acres. Due to its flow regime and tributary relationship with the Sacramento River, the intermittent creek is believed to be a jurisdictional Water of the U.S. The ephemeral creeks in the site do not appear to meet the technical and regulatory criteria of jurisdictional Waters of the U.S.
- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site.
- Although considered unlikely, Swainson's hawks may occur in the site on occasion, utilizing the grasslands in the site for foraging or nesting in trees in and nearby the site. Due to the limited footprint of future development and the limited value of the disturbed grassland habitat in the site for Swainson's hawk foraging, the project would result in a less than a significant reduction of potential Swainson's hawk foraging habitat.
- Due to a lack of suitable habitat and location of the site in an area surrounded by development, no other special-status wildlife species are expected to occur in or near the site on more than an occasional basis.

- The site is not within designated critical habitat of any federally listed species.
- The trees and grasslands in the site may be used by nesting birds protected by the Migratory Bird Treaty Act of 1918 and Fish and Game Code of California. If vegetation removal and/or project construction occurs between February 1 and August 31, a pre-construction nesting bird survey is recommended. If active nests are found within the survey area, vegetation removal and/or project construction should be delayed until a qualified biologist determines nesting is complete.

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

Sincerely,



Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

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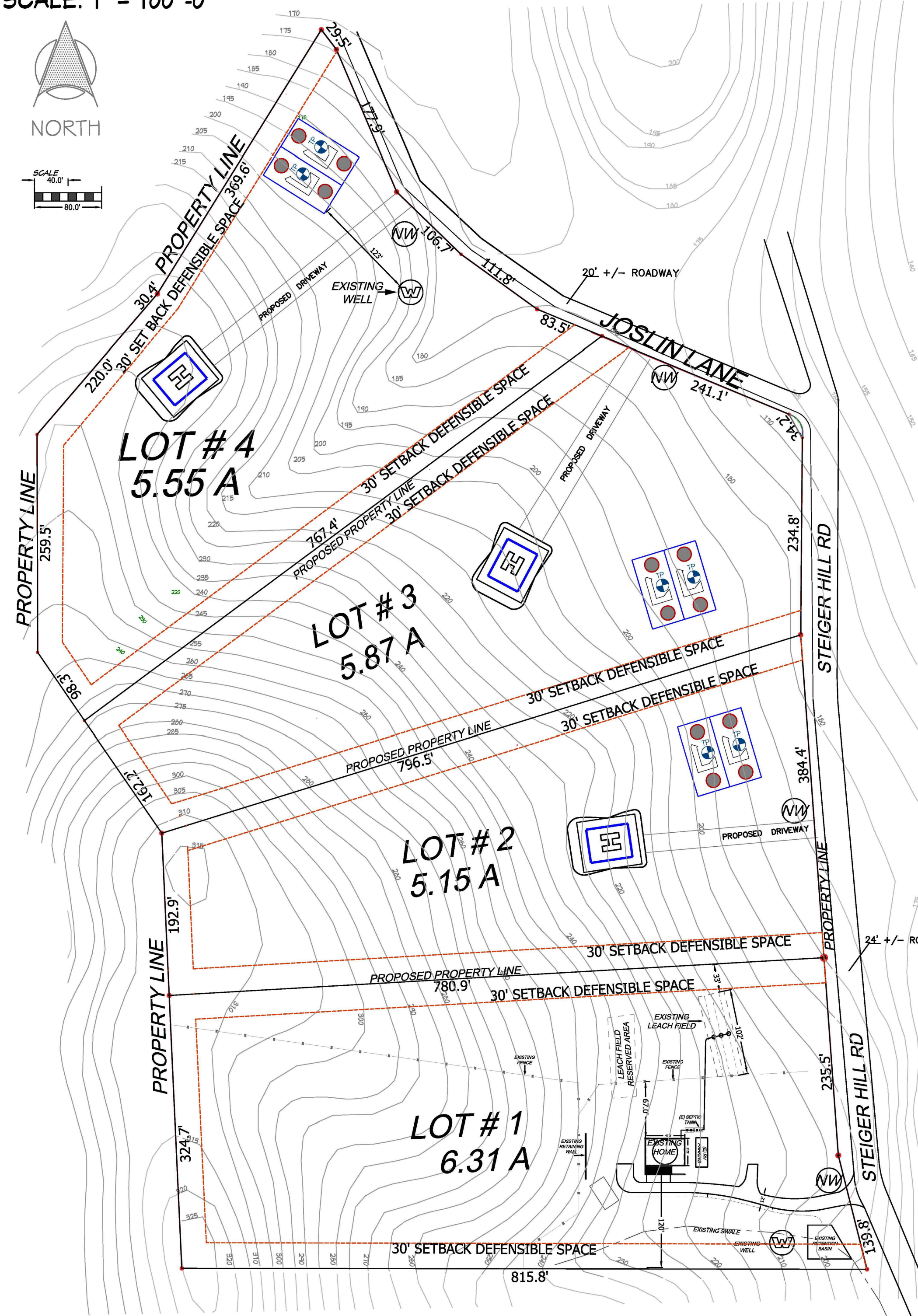
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Attachment A

Tentative Map

SCALE: 1" = 100' -0"



TENTATIVE PARCEL MAP

7061 Steiger Hill Rd

NOTES:

LANDS AREA	22.9 ± AC 22.974 ± AC NET	
# PROPOSED LOTS	4	
# 1	6.31 AC	275,077.8 Sq F
# 2	5.15 AC	224,477.3 Sq F
# 3	5.87 AC	255,891.2 Sq F
# 4	5.55 AC	242,130.4 Sq F
ZONING	RR - 2.5	
WATER SOURCE	ON-SITE WELLS / RNVWD	
WASTE WATER DISPOSAL	ON-SITE SEPTIC/ LEACH FIELD SYSTEMS	

GENERAL NOTES:

PROPOSED DRIVEWAYS, HOUSE OR LEACH FIELDS, WILL BE CONSTRUCTED WITHIN REQUIRED SETBACK ZONES AND MUST MEET SOLANO COUNTY IMPROVEMENT STANDARDS AND SPECIFICATIONS

NOTE:

PRIOR TO FINAL INSPECTION OF THE SEWAGE DISPOSAL SYSTEM THE PROPERTY OWNER SHALL VERIFY DRAINAGE SWALES AT MINIMUM OF 50' FROM ALL PORTIONS OF THE PRIMARY AND RESERVE SEWAGE DISPOSAL FIELDS.

LEGEND

- HOUSE SITE (PROPOSED)
- LEACH FIELD, 10,000 SQ. FT. (PROPOSED)
- LEACH FIELD, TEST HOLE (PROPOSED)
- PERCOLATION TEST HOLE (PROPOSED)
- NEW RNVWD WATER CONNECTION (PROPOSED)
- EXISTING WATER WELLS
- EXISTING CONTOURS

LOCATION



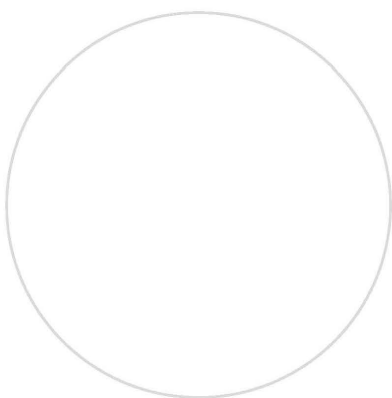
PROJECT NAME
STEIGER LANDS
APN: 0105-190-090
LOT SIZE
22.974 ACRES

PROPERTY DETAILS:
APN: 0105-190-090
ADDRESS:7061 STEIGER HILL ROAD
LOT SIZE: 22.974 ACRES
ZONING: RR-2.5

OWNER APPLICANT:
Nor-Cal Properties
Management LLC
ADDRESS: 102 VINE ST
VACAVILLE CA 95688

PROJECT DESIGN BY:
TA PROJECTS Tony Alcala
813 Granite Court
Vacaville Ca 95687
707-724-9733
SIGNATURE:

PROJECT ENGINEER:
RFE Engineering, Inc.
2260 Douglas Boulevard,
Suite 160
Roseville Ca 95661
916-772-7800



REV.	DATE	DESCRIPTION

PAGE TITLE :		
TENTATIVE MAP		
ISSUE DATE:	2-25-20	PAGE #
PROJECT #	VV109	TM-1

Attachment B

CNDDB Summary Report and Exhibits
& USFWS IPaC Trust Reports



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS (Allendale (3812148) OR Mt. Vaca (3812241) OR Elmira (3812138) OR Fairfield North (3812231))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
<i>Atriplex depressa</i> brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesoavallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
<i>Chloropyron molle</i> ssp. <i>hispidum</i> hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T1	S1	1B.1
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
<i>Delphinium recurvatum</i> recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elaphrus viridis</i> Delta green ground beetle	IICOL36010	Threatened	None	G1	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Extriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Fritillaria pluriflora</i> adobe-lily	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
<i>Hesperolinon breweri</i> Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Isocoma arguta</i> Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
<i>Lasthenia conjugens</i> Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Lindieriella occidentalis</i> California lindieriella	ICBRA06010	None	None	G2G3	S2S3	
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
<i>Plagiobothrys hystriculus</i> bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1

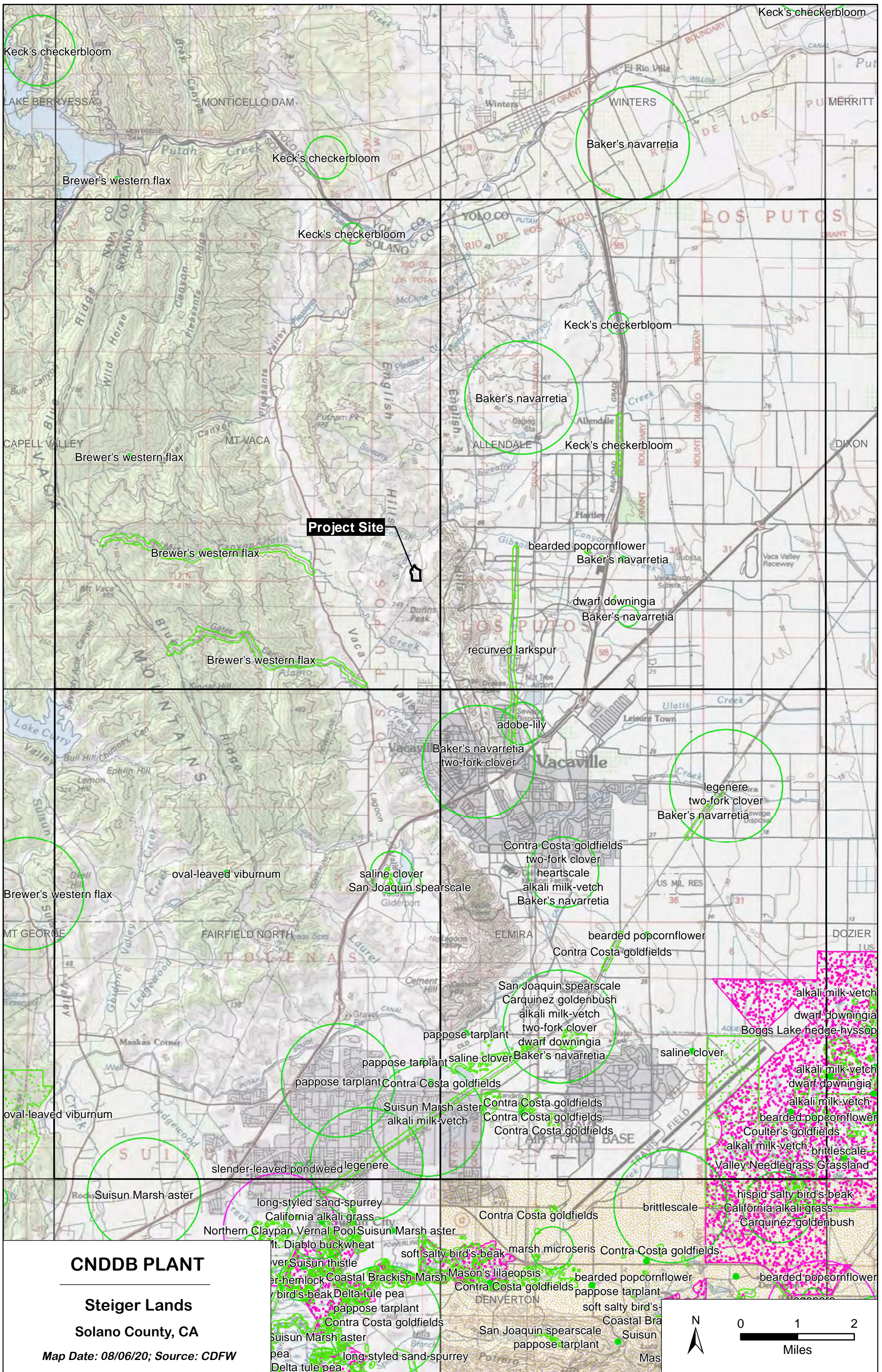


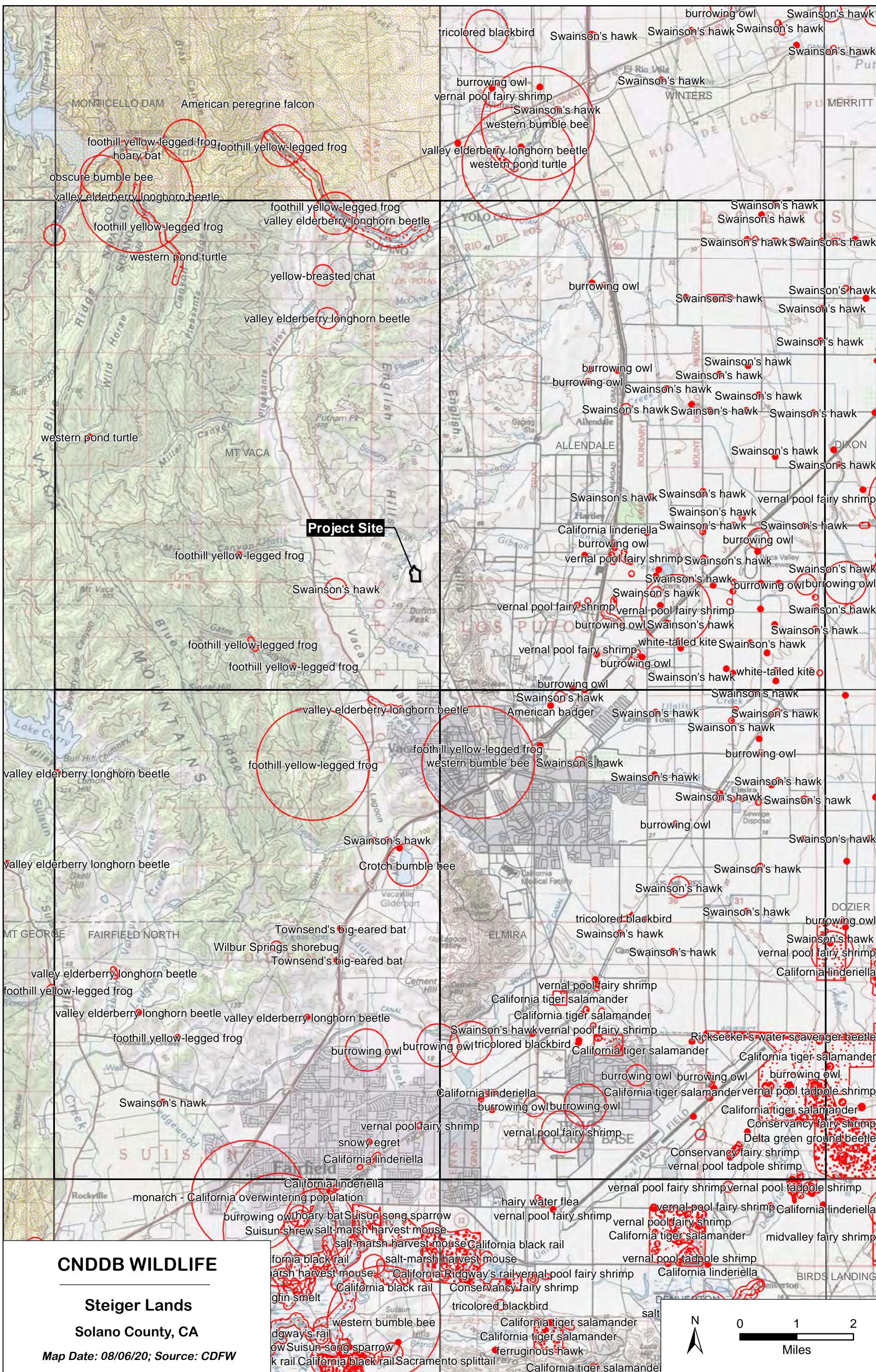
Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<i>Saldula usingeri</i> Wilbur Springs shorebug	IIHEM07010	None	None	G1	S1	
<i>Sidalcea keckii</i> Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
<i>Sorex ornatus sinuosus</i> Suisun shrew	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
<i>Stuckenia filiformis ssp. alpina</i> slender-leaved pondweed	PMPOT03091	None	None	G5T5	S2S3	2B.2
<i>Symphotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Trifolium amoenum</i> two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3

Record Count: 52





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

Solano County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

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 [Ecological Services Program](#) 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 [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Birds

NAME	STATUS
------	--------

Northern Spotted Owl *Strix occidentalis caurina*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1123>

Reptiles

NAME

STATUS

Giant Garter Snake *Thamnophis gigas*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4482>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

California Tiger Salamander *Ambystoma californiense*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2076>

Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/321>

Insects

NAME

STATUS

Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

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

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica* Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7903>

Conservancy Fairy Shrimp *Branchinecta conservatio* Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/8246>

Vernal Pool Fairy Shrimp *Branchinecta lynchi* Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

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

Vernal Pool Tadpole Shrimp *Lepidurus packardii* Endangered

There is **final** critical habitat for this species. Your location is outside 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.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>

- Nationwide conservation measures for birds

<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

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

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

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Burrowing Owl *Athene cunicularia*

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/9737>

Breeds Mar 15 to Aug 31

Golden Eagle *Aquila chrysaetos*

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

<https://ecos.fws.gov/ecp/species/1680>

Breeds Jan 1 to Aug 31

Lewis's Woodpecker *Melanerpes lewis*

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

<https://ecos.fws.gov/ecp/species/9408>

Breeds Apr 20 to Sep 30

Long-billed Curlew *Numenius americanus*

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

<https://ecos.fws.gov/ecp/species/5511>

Breeds elsewhere

Nuttall's Woodpecker *Picoides 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

Rufous Hummingbird *Selasphorus rufus*

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

<https://ecos.fws.gov/ecp/species/8002>

Breeds elsewhere

Song Sparrow *Melospiza melodia*

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

Breeds Feb 20 to Sep 5

Spotted Towhee *Pipilo maculatus clementae*

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/4243>

Breeds Apr 15 to Jul 20

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 and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

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

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

Breeding Season (■)

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

Survey Effort (|)

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

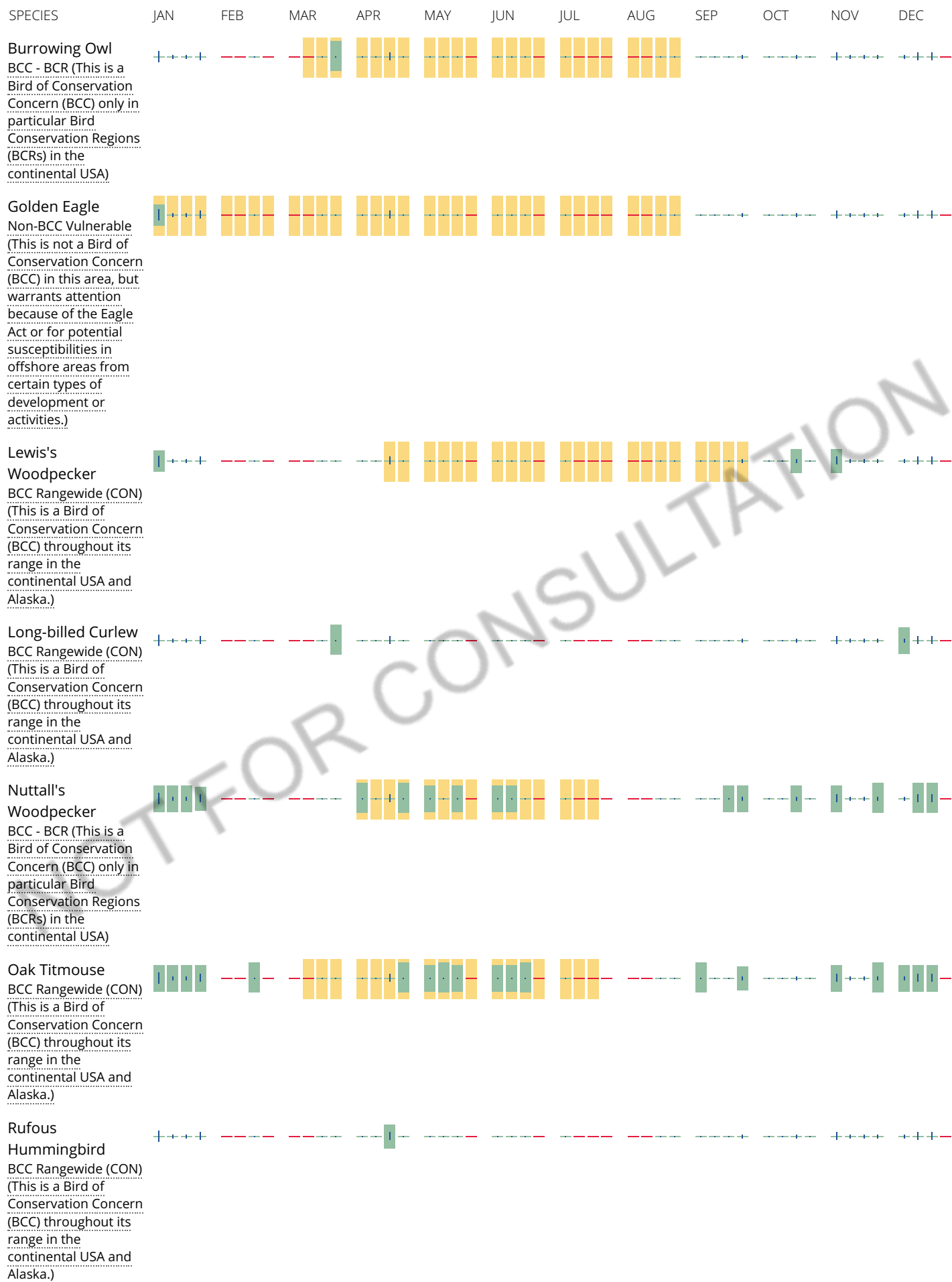
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

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





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

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

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

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

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

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

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

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

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

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

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

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFOA](#)[PSSA](#)[PSSCh](#)

FRESHWATER POND

[PUBHh](#)[PUBFh](#)

RIVERINE

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid 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 C

Photographs



Annual grassland in the body of the site, looking east from the west edge of the site; 08/18/20. The grassland in the site is highly disturbed from horse grazing.



Notable hill in the west part of the site, looking southwest from the corner of Steiger Hill Road and Joslin Lane; 08/18/20.



East edge of the site, looking north along Steiger Hill Road from the southeast corner of the site; 08/18/20.



Northeast edge of the site, looking northwest along Joslin Lane from the intersection of Joslin Lane and Steiger Hill Road; 08/18/20.



Fenceline in the northwest part of the site, looking northeast; 08/18/20.



Southern fenceline, looking east from the southwest corner of the site; 08/18/20.



Ephemeral creek in the north part of the site, looking southwest up the creek; 08/18/20.



Ephemeral creek in the north part of the site, looking northeast from the top of the creek; 08/18/20.



Ephemeral creek in the south part of the site, looking northeast down the creek from the south edge of the site; 08/18/20.



Small intermittent creek in the southeast corner of the site, looking southeast up the creek; 08/18/20. The ephemeral creek in the south part of the site drains into this intermittent drainage.



Home site in the southeast part of the site, looking northwest from the southeast corner of the site; 08/18/20.

Attachment D

National Wetland Inventory Map



U.S. Fish and Wildlife Service

National Wetlands Inventory

Steiger Lands



August 5, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

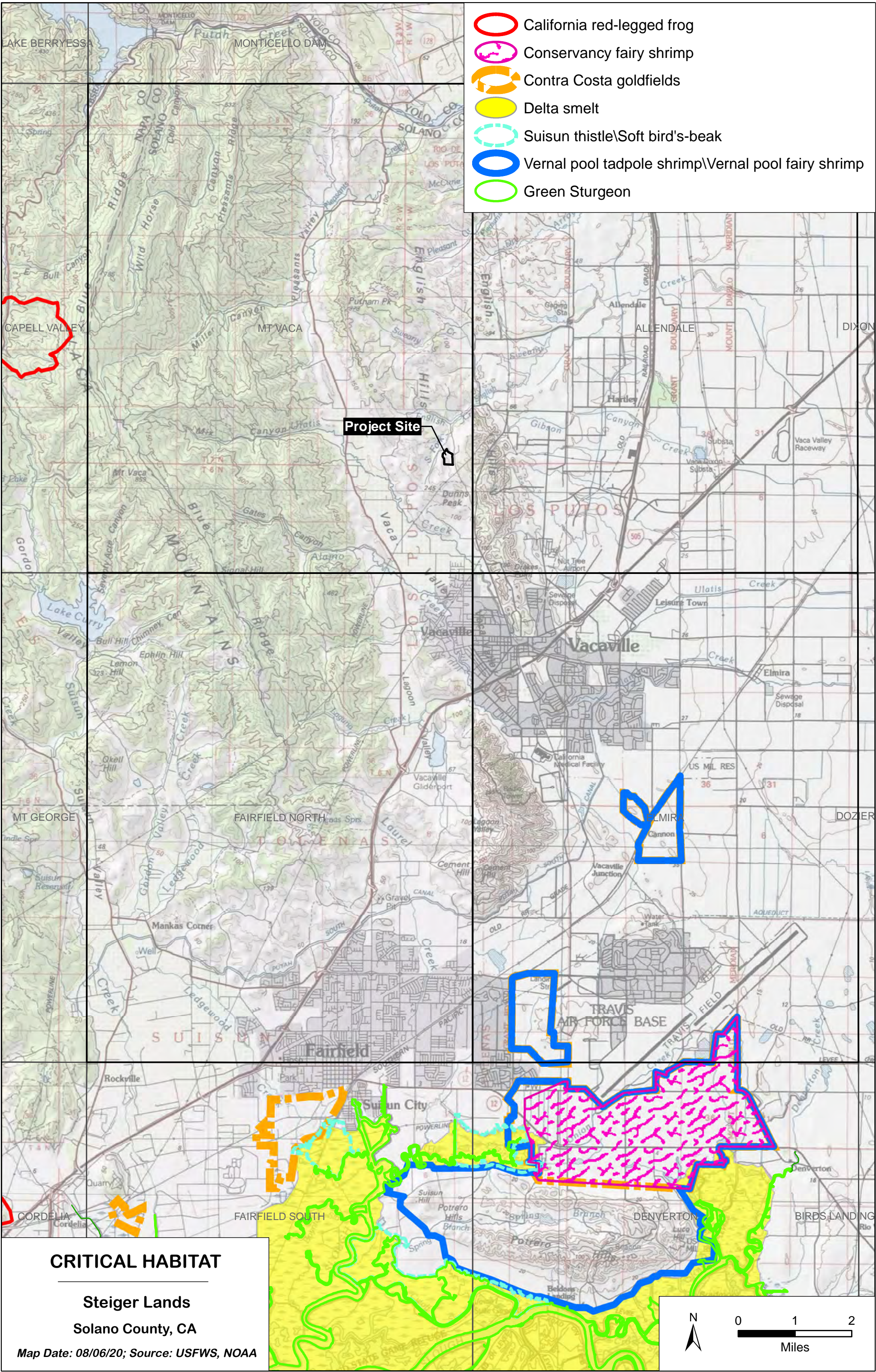
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment E

Designated Critical Habitat





RURAL NORTH VACAVILLE WATER DISTRICT

October 19, 2020

Building Official
Solano County Department of Resource Management
675 Texas Street, Suite 5500
Fairfield, CA 94533

Subject: Will Serve Confirmation; Subdivision application MS 20-02

Reference Address: 7061 Steiger Hill Road, Vacaville CA 95688, APN 105-190-090

Dear Building Official:

This “will serve” letter is written in reference to the above subject property address as requested by the property owner Norcal Properties Management, LLC. This property is not in the water district. The board of directors has approved Resolution 2020-44 requesting Annexation by LAFCO.

The District has approved the sale of 4 water rights to the developer upon annexation by LAFCO and as a condition of the Tentative map approval. The District requires that the developer shall purchase 4 water rights and that all improvements shall be designed, engineered and installed by the developer in accordance with the requirements of the most recent District Rules and Regulations and Exhibits and that the work be approved and accepted by the District as a condition precedent to the recording of a Final map.

The water district is a rural drinking water system. New residences may need to provide additional on-site storage for in-house fire protection systems. Hydrants within the district are for the filling of fire department tanker trucks (there is no guarantee on flow rate or quantity of water available). The landowner should verify the risks and limitations regarding fire protection in this area.

Please contact the undersigned if you have any questions.

Sincerely,

Gordon Stankowski
General Manager



Solano Local Agency Formation Commission

675 Texas St. Ste. 6700 • Fairfield, California 94533
(707) 439-3897 • FAX: (707) 438-1788

June 15, 2020

Notice of an Incomplete Application

Gordon Stankowski, General Manager
Rural North Vacaville Water District
PO Box 5097
Vacaville CA 95696

RE: LAFCO Project No. 2020-04: Steiger Hill Subdivision Annexation to the Rural North Vacaville Water District (APN: 0105-190-090)

Dear Mr. Stankowski:

Solano Local Agency Formation Commission (LAFCO) received a change of organization (annexation) application on June 16, 2020 from the Rural North Vacaville Water District (RNVWD) for the above subject proposal. California Government Code Section 56658 requires LAFCO to determine whether the application is complete and acceptable for filing within 30 days of receiving an application. This letter is to inform you that the application for the above subject proposal is incomplete.

Solano LAFCO's Mandatory Standard Six requires the applicant to provide environmental studies in compliance with the California Environmental Quality Act (CEQA) Guidelines. For the subject property, the property owner has also applied to Solano County indicating their desire to subdivide the property into four parcels. With the totality of the project (the subdivision and the change of organization applications), it is highly likely the proposal cannot qualify for an exemption under the CEQA guidelines. As we discussed, to advance the subject application expediently, it will be more practical to have Solano County include the LAFCO actions in their environmental analysis. Using this method, the County and LAFCO can use one CEQA document.

We may require additional information from RNVWD and the applicant as we continue to process your application. Please contact us if you have any questions.

Sincerely,

Michelle McIntyre

c: Solano County Resource Management

Commissioners

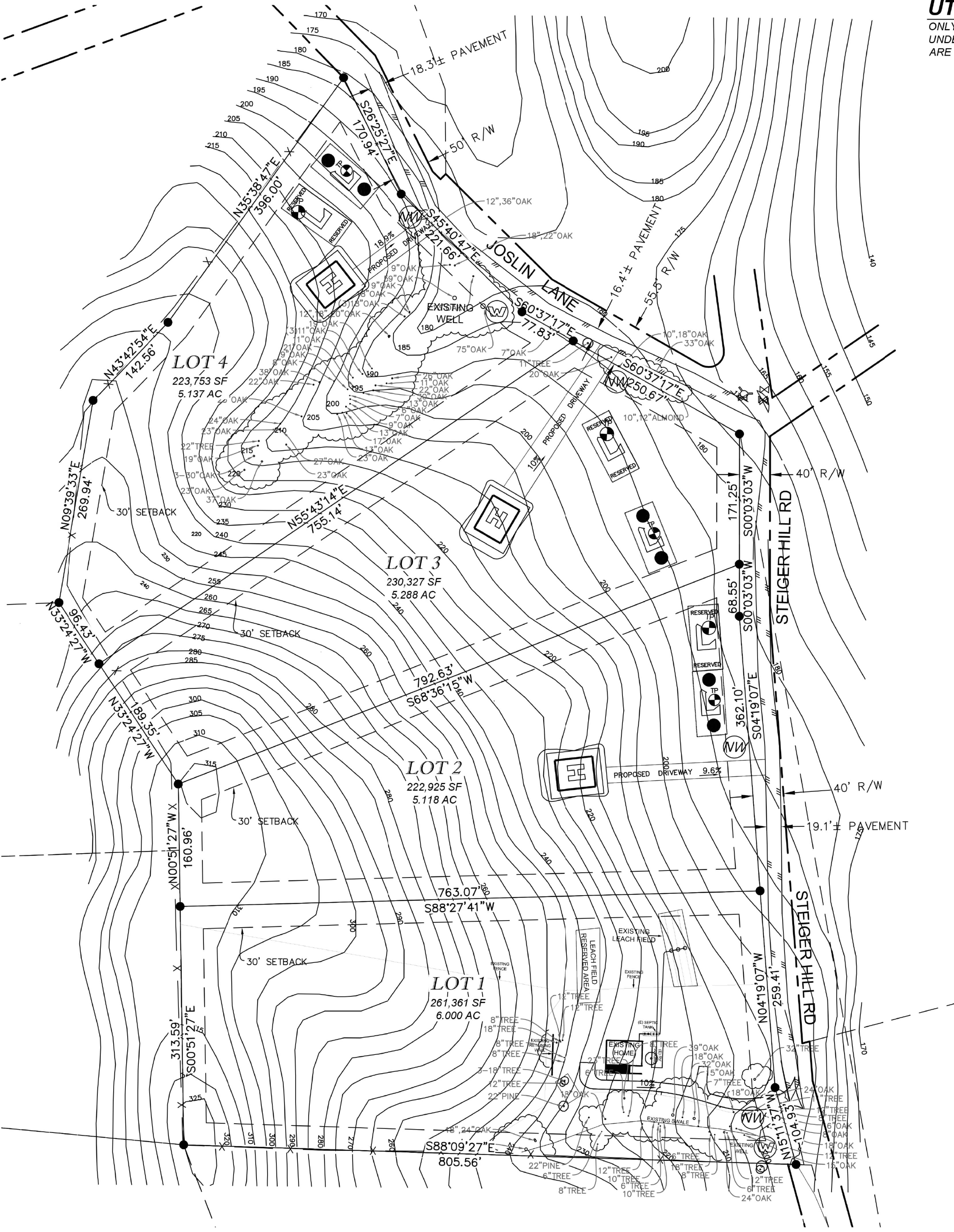
Nancy Shopay, Chair • Ron Rowlett, Vice-Chair • Harry Price • Jim Sperring • John Vasquez

Alternate Commissioners

Ron Kott • Shawn Smith • Skip Thomson

Staff

Rich Seithel, Executive Officer • Michelle McIntyre, Sr. Analyst • P. Scott Browne, Legal Counsel



UTILITY NOTE:
ONLY SURFACE UTILITIES HAVE BEEN SHOWN PER THIS SURVEY.
UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED OR RESEARCHED AND
ARE NOT SHOWN HEREON.

TENTATIVE PARCEL MAP

7061 Steiger Hill Rd

NOTES:

LANDS AREA	22.9 ± AC 21.543 ± AC NET	
# PROPOSED LOTS	4	
# 1	6.00 AC	261,361 Sq F
# 2	5.11 AC	222,925 Sq F
# 3	5.29 AC	230,327 Sq F
# 4	5.14 AC	223,753 Sq F
ZONING	RR - 2.5	
WATER SOURCE	ON-SITE WELLS / RNVWD	
WASTE WATER DISPOSAL	ON-SITE SEPTIC/ LEACH FIELD SYSTEMS	

GENERAL NOTES:

PROPOSED DRIVEWAYS, HOUSE OR
LEACH FIELDS, WILL BE CONSTRUCTED
WITHIN REQUIRED SETBACK ZONES
AND MUST MEET SOLANO COUNTY
IMPROVEMENT STANDARDS AND
SPECIFICATIONS

NOTE:

PRIOR TO FINAL INSPECTION OF
THE SEWAGE DISPOSAL SYSTEM
THE PROPERTY OWNER SHALL
VERIFY DRAINAGE SWALES AT
MINIMUM OF 50' FROM ALL
PORTIONS OF THE PRIMARY AND
RESERVE SEWAGE DISPOSAL
FIELDS.

LEGEND



HOUSE SITE (PROPOSED)



LEACH FIELD, 10,000 SQ. FT. (PROPOSED)



LEACH FIELD, TEST HOLE (PROPOSED)



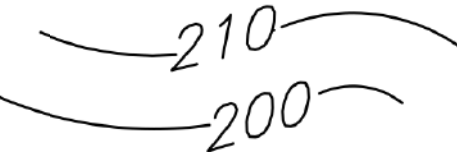
HYDROMETER TEST HOLE (PROPOSED)



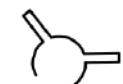
NEW RNVWD WATER CONNECTION (PROPOSED)



EXISTING WATER WELLS



EXISTING CONTOURS



EXISTING FIRE HYDRANT



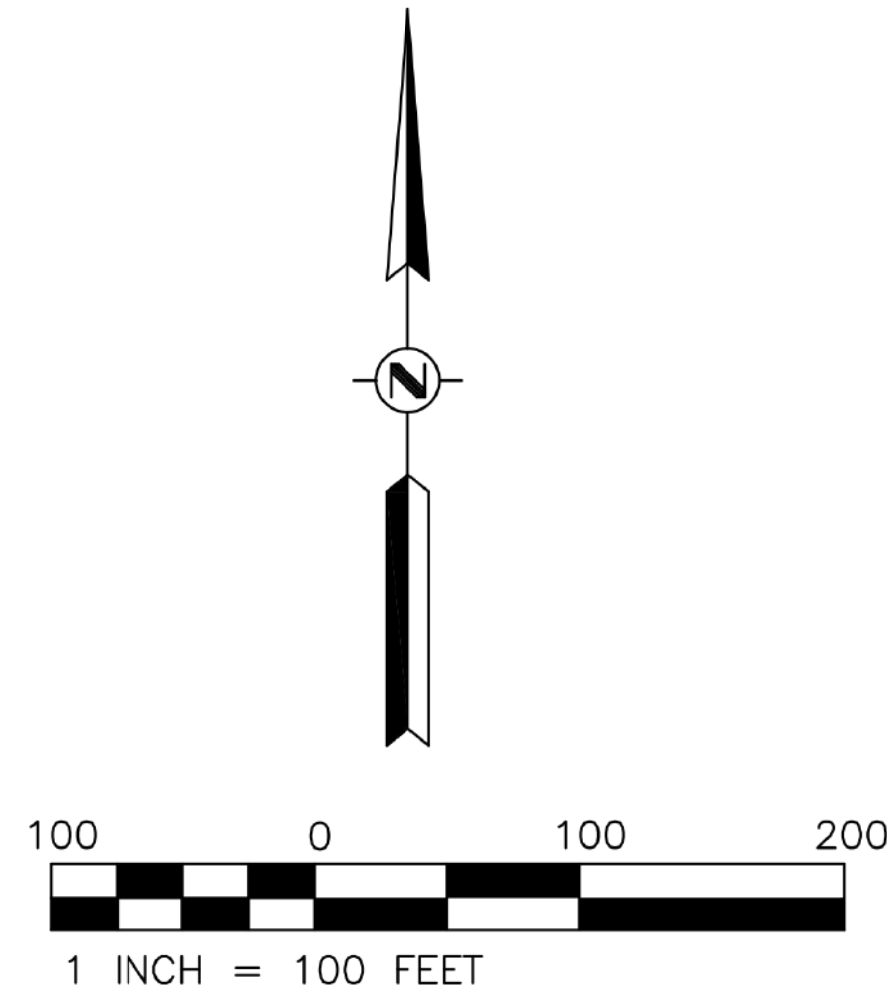
EXISTING WATER VALVE



EXISTING UTILITY POLE



ROAD RIGHT OF WAY



RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors

2260 Douglas Blvd, Suite 160, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

SURVEYOR'S STATEMENT

I HEREBY STATE THAT THIS IS A CORRECT REPRESENTATION OF A
TOPOGRAPHIC SURVEY MADE UNDER MY DIRECTION NOVEMBER 2020.

STEVEN B. KILLMER

12-22-2020
DATE

